RAILROAD

MAGAZINE | DECEMBER 50c

No. 5244, the Pennsy's last active steam locomotive, makes her final run — on the 19-mile Union Transportation line in New Jersey.
Photo by David Plowden

MIKADO TYPE ENGINES
by H. L. KELSO

Private Cars On Shortlines
by LUCIUS BEEBE

MONTANA'S ONLY INTERURBAN
by PAUL BUSCH

Salesman who "never uses" the railroads

The highways he travels . . .

The car he drives . . .

The products he sells for his company (and that he'll later have shipped to his customers) . . .

All come by low-cost railroad transportation — as raw materials, component parts, finished products. There's railroad service in every item in his line.

Salesman who "never uses" the railroads? There's never a day when he doesn't!

Railroads carry more of the things you use than any other form of transportation. And they save you money, too, because railroads are a *low-cost* way of shipping freight.

That's why financially sound, progressive and strong railroads are important to you. They are essential both to an expanding economy and to the national defense. It's in your interest that railroads be given the *equality of treatment and opportunity* on which their health depends — now and in the future.

ASSOCIATION OF

AMERICAN RAILROADS

WASHINGTON 6, D. C.

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Just the same, I took quick stock of myself that night. Came up with four good reasons why the company would keep me on:

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Getting along with foreman
Turning out acceptable work
Prompt and dependable

And four just-as-good reasons why they might let me go:

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Others better qualified
Still rated "semi-skilled"
Needs special training

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RAILROAD MAGAZINE

THE MAGAZINE OF ADVENTUROUS RAILROADING—FOUNDED 1906

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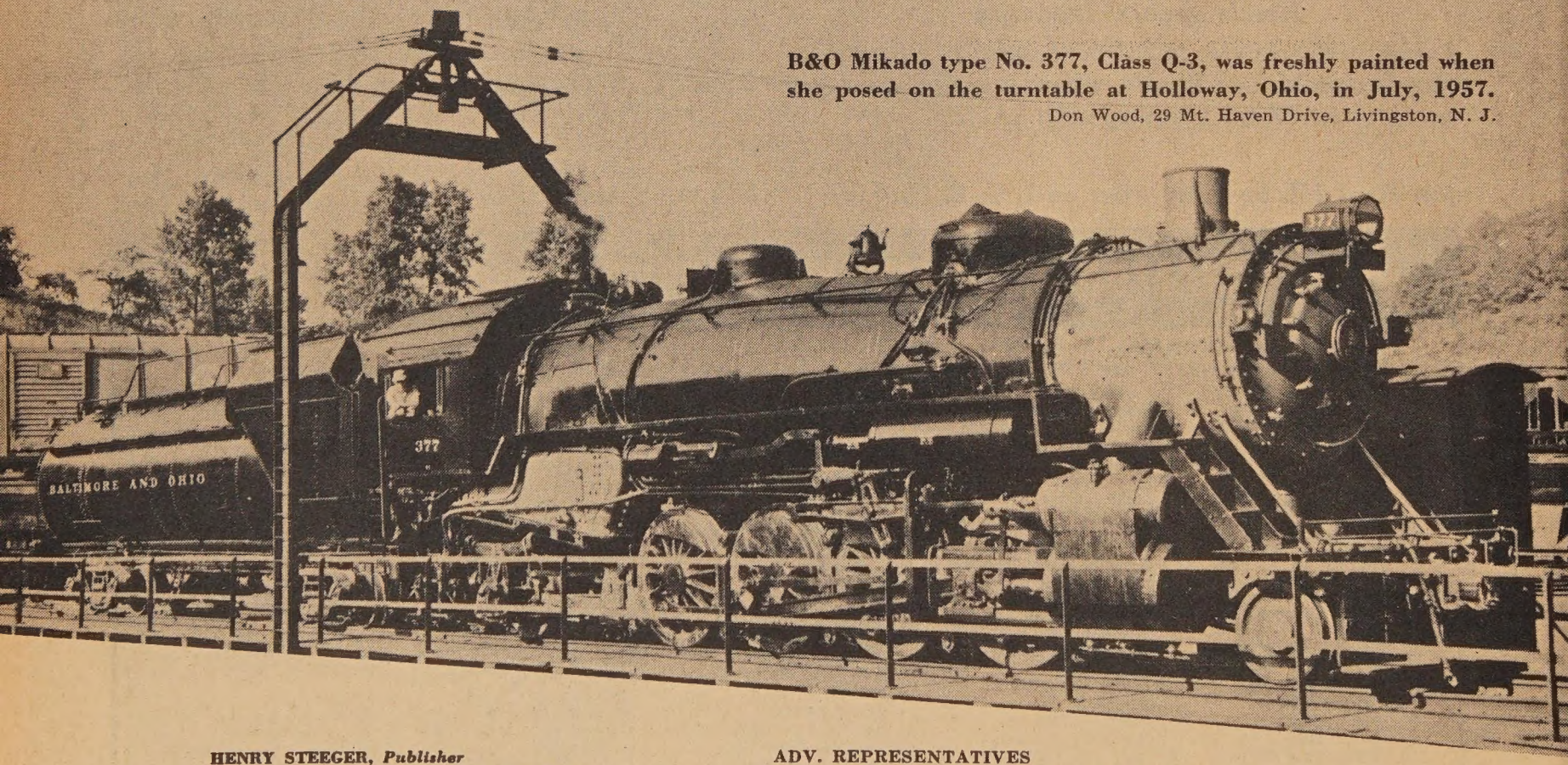

B&O Mikado type No. 377, Class Q-3, was freshly painted when she posed on the turntable at Holloway, Ohio, in July, 1957.
Don Wood, 29 Mt. Haven Drive, Livingston, N. J.

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MAIL CAR

Railroaders and Fans Sit in With the Editorial Crew

ALTHOUGH the New Haven was dieselized officially in April '52 it retained three Mikes, 3006, 3016, and 3020, Class J-1, Alco-built in 1916, which it converted to snow-melters, reports Harry Chase, 18 Beech St., Mansfield, Mass. The 3016 had one last moment of glory. Condemned to the junk pile in the fall of '57, she was being cannibalized for small parts at Cedar Hill Yard when in May '58 she got a brief reprieve. She was hauled back into the enginehouse and fixed so she could run, at reduced pressure, and the name *Eastern & Portland* and number 57 were painted on her. Then she played a part in the movie *It Happened to Jane* (photo in our Oct. '59 issue). Later, an attempt was made to get her for a fantrip, but the New Haven refused and scrapped all three Mikes in Oct. '58. ●

BREVITIES. Unique accident: the other day Illinois Central train 15 hit a camel, breaking one of its legs. The unfortunate beast belonged to a circus showing at Belleville, Ill., but had been tethered carelessly too close to the track. Splints were placed on the injured leg.

The 36-mile Santa Maria Valley Railroad in California, which still operates a steam engine, is making the first use of General Electric's new model U6B universal diesel-electric locomotive in western United States. This model, designed for service all over the world, is rated at 700 hp. and 34,000 lbs. of continuous tractive effort.

Using a method that cuts costs by as much as a whopping 75 percent, Jersey Central is painting most of the 311 steel bridges along its 612 miles of road. The new method produces a better job. Actually, it isn't paint. It's an asphaltic oil which dries to a hard, black, mirror-like finish, with a "life expectancy" of 10 to 12 years.

Referring to Bill Knapke's article on "Markers" (June issue), Leo Broadstreet says the Southern Pacific and T&NO no longer use the standard marker light on cabooses but have a single electric light mounted on top. Red shows while on the main, green while in the clear. Juice is furnished by an axle-belt generator and batteries, which also power radio and regular caboose lights.

The Southern has just bought Interstate Railroad, an 87-mile coal-hauling line that connects with it at Appalachia, Va. Stockholders and ICC approved.

When Queen Elizabeth of England and Prince Philip visited Canada last summer, the Canadian Pacific's 12-car royal train, which also carried newsmen, slowed down half a dozen times. The engineer would sound a buzzer to notify the party that crowds had gathered ahead alongside the track, and the royal pair would go to the rear platform to wave.

Back in 1860, New York Central bought 3.8 acres of land at Jordan, N. Y., in which to store fuel for wood-burning locomotives. For years the Central has been trying in vain to sell the now-vacant property, on which it pays $4 a year taxes. (This should interest Bill Knapke, who has written a feature on "Woodburners" for our next issue.)

One of the first locos used in Hawaii's 125-year-old sugar industry was a 2-4-0 bought from Dusseldorf, Germany, in 1887, shipped halfway around the world by way of Cape Horn, and named *Paulo* for Paul Isenberg, a president of Koloa Sugar Co. She now stands idle at Puhi. The *Paulo's* present owner, Grove Farm Co., Ltd., may shift her to Koloa if and when a park and museum are built on the site of the old Koloa sugar factory.

Additions and corrections to list of "Steam Engines on Display" (Oct. '59) will appear in next issue.

Southern Pacific completed its 13-mile causeway across Great Salt Lake in July, roughly a year ahead of schedule, and trains are using it. The line is single-tracked. Building it took 43.5 million cubic yards of sand, gravel, and rock, dumped with the aid of 11 barges and several smaller craft. This "navy" has been disbanded and placed on sale.

Down in western Texas also the SP is making history. Its horseshoe curve, built in 1881, won't be around much longer. The road will spend over $2 million for 9.29 miles of new main track and sidings between Etholen and Small, plus installation of 75 miles of CTC between Belen and Sierra Blanca. Line now being built, eliminating Horseshoe Curve, will retire 11.53 miles of present main trackage with 30 sharp curves and permit passenger-train speeds of 75 mph in the area. Present maximum is 30 mph. ●

JAPAN HEARD FROM. "After our Prince Ahkito had married Miss Michiko Syoda they left Tokyo by the imperial train for a trip more than 300 miles westward to report their wedding to the Ise shrine, our country's oldest and largest hallowed place, dedicated to the god Amaterasu Oomikami, the legendary founder of Japan," writes Sinichi Miyazaki, 1299 Ohno, Inaba-Cho, Inaba-Gun, Gifu-Ken, Japan.

"The train, consisting of five cars, was pulled by EF58 type electric locomotive as far as Nagoya, where steam engine C58216, carrying the national flag on front, took over for the rest of the journey, on non-electrified line. The crew had been chosen carefully beforehand so as to get men with the highest technical qualifications on the division. I am rather proud to have taken a photograph of that train.

"Incidentally, I would like some American reader please to send me information about rules and regulations governing the amount of noise that a locomotive whistle or air-horn is allowed to make in populated areas. I also want to know about the sounds made by locomotive whistles, air-horns, and bells. When is each sound made? Why are both a bell and a whistle necessary on the same train? Also, I am interested in learning the technical details of train-washing machines and how they operate." ●

KELSO'S articles invariably draw a flood of mail, mostly favorable. Commenting on "Mountain Type Engines," Bill Blewett denies New York Central 4-8-2's were "the only engines on our continent known by any other name than *Mountain*." He says the Illinois Central called its 4-8-2's *Central* types. Several fans point out that at least five roads—the Lehigh Valley, the New Haven, the Lackawanna, the Rio Grande, and the NWC—used 3-cylinder 4-8-2's.

"New Haven had 13 of them, Nos. 3550-'52, Alco-built in 1926 and '28,

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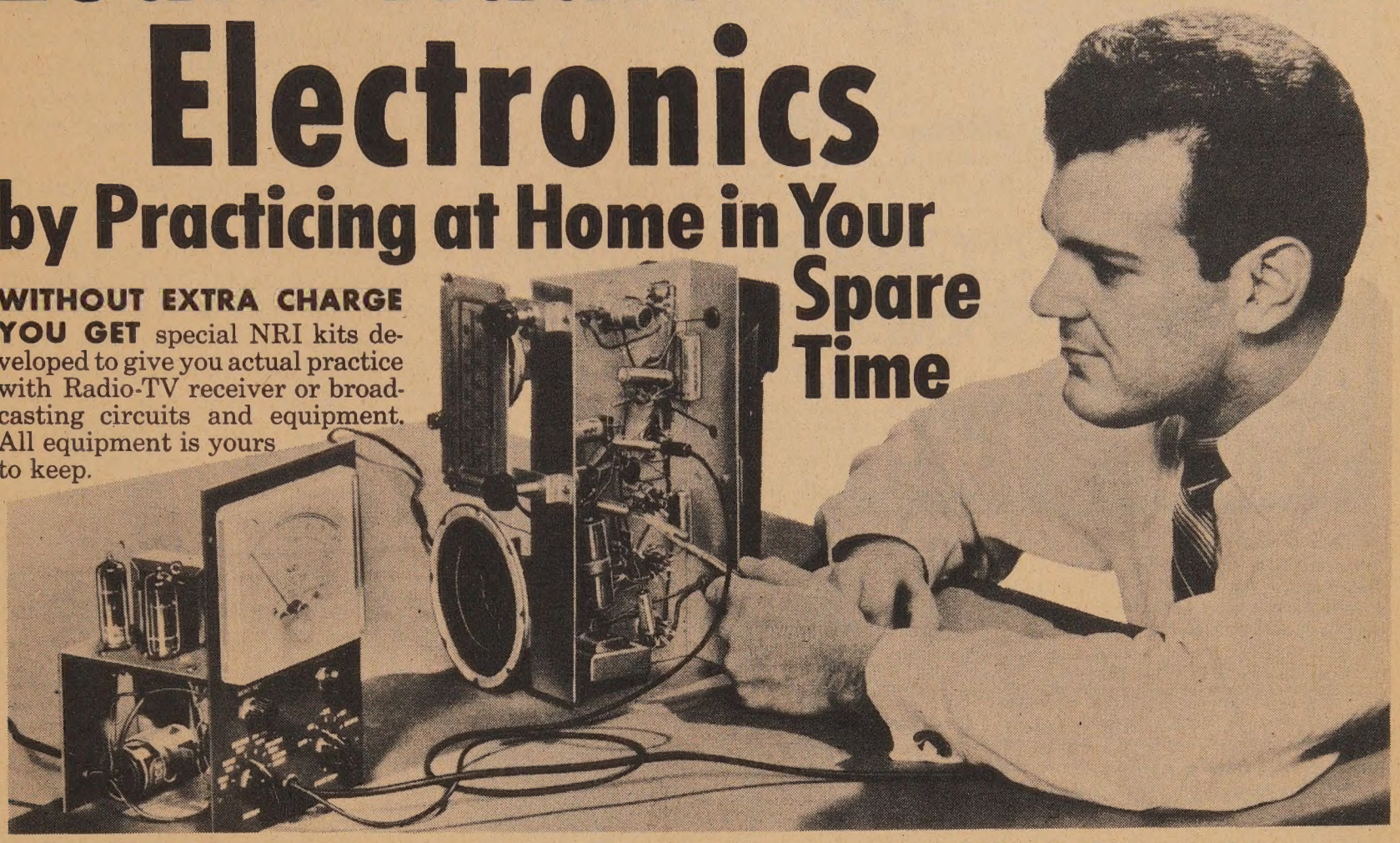

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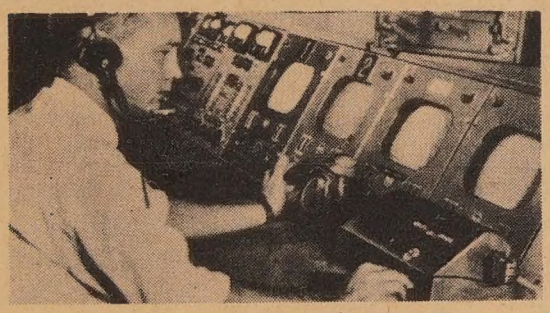

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CITY.....STATE.....

designed to haul 100-car freights at speeds up to 60 mph in mainline service," writes Harry Chase. "With 69" drivers, 22x30" cylinders, and 265 lbs. boiler pressure, they packed a tractive effort of 71,000 lbs. into an engine weight of 379,700 lbs. Did any other Mountains have a higher t.e.? Once you heard their sextuple-drumbeat rhythm you'd never forget it."

Says Lewis Walter, 34 Highview St., Norwood, Mass.: "Those 13 engines worked the Shore Line until after the war, but finally the high maintenance on the third cylinder and related linkage led to their demise. New Haven had joined the Mountain parade in 1919, getting from Alco 10 USRA light 4-8-2's, next year 30 more, in 1924 10 more, and in 1926 seven more. They were classed R1, R1b, R2, R2a, R3, and R3a."

"Lackawanna's 3-cylinder Mountains comprised numbers 1450-1454 (passenger) and 2201-2235 (freight)," explains R. F. James, 45 N. 20th St., East Orange, N. J. "The 1450's were built by Schenectady in 1926 with cylinders 25x32" (outside) and 25x28" (inside), 63" drivers, and weight 395,000 lbs. Later they were rebuilt as conventional 2-cylinder types. The 2200's, Brooks-built in 1925, had cylinders 28-32" (outside) and 28x28" (inside) and 63" drivers."

Mr. James's father worked 50 years for the Lackawanna, rising from engine wiper to general superintendent of motive power and assistant vice president of operations, retiring last March. Now listen to Dick Highum, 4902 Nearglen Ave., Covina, Calif.:

"With passenger traffic and steel equipment increasing, the Denver, Rio Grande & Western needed engines of greater capacity than its Pacifics. So in 1922 Alco built 10 Mountain types, Class M-67, with 28-30" cylinders and 63" drivers, and next year 20 more of the same, M-78. They were followed in 1926 by 10 Baldwin 4-8-2's Class M-75, which, in design and capacity, were among the most notable of their type."

A Jersey Central engineer, Warren B. Crater, 270 W. Colfax Ave., Roselle Park, N. J., comments: "The D&RGW had some 4-8-2's, 1600 series, with three Walschaert valve gears, two on the right side. Kelso should have mentioned also the pioneer long-distance runs of Southern Pacific 4-8-2's between El Paso and Los Angeles and the early adoption of this type to New York

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Central freight service, one of which was 3-cylindered."

By careful research, Kelso accumulates a great many more details on engine types than space permits him to use in articles. For example, he had enough information to write two different features on Mikados, but we said that one was all we could find room for. A similar situation exists with magazines in general. ●

NEW YORK commuter service has been given a lift by the State Legislature's passage of Governor Rockefeller's commuter aid program, according to Alfred E. Perlman, president of the New York Central, addressing a U. S. Senate subcommittee.

By contrast he cited the case of the Central's West Shore train service parallelling the Hudson River and deplored the N. J. Public Utilities Commissioners' "frustrating, delaying tactics." After the West Shore line's patronage had been cut from 3,000 to 155 daily commuters by the railroad ending its cross-river ferry operation, the Central petitioned both N. Y. and N. J. commissions for the right to discontinue rail service also. N. Y. quickly agreed; N. J. didn't. For months, even after many hearings, the N. J. commission has been forcing the Central to run 23 trains a day for just 55 N. J. commuters, on which Mr. Perlman says the road loses $3,100 daily.

"It costs us $56 a day in out-of-pocket losses for each of these commuters," he adds, "a sum that could provide *seven* Cadillacs and a chauffeur for each rider!" ●

PERSONALITIES. Meet Judith Ann Dorrell, railroader's daughter, age 18, who lives on an 80-acre farm at RFD 1, Fort Madison, Iowa. Her father entered Santa Fe service in 1942 and was promoted to locomotive engineer in '47 but is now a freight-pool fireman on the Illinois Division. Judy can ride a pony, dance, and operate a tractor. Last year she raised a calf to help pay her way through Iowa State College at Ames, where she is majoring in journalism.

Judith Ann Dorrell

Paul Busch, retired motorman, wrote "Montana's Only Interurban" (page 29) with some help from Thomas T. Taber III, Box 164, Muncy, Pa.

On June 24, 1907, when *Railroad Magazine* was less than a year old, Dr. Austin Smith bought a 15-cent ticket for the 5-mile trip from Estill Springs to Decherd, Tenn., on the Louisville & Nashville. But he did not use it until exactly 52 years later! Last June 24 the *Dixie Flyer* made an unscheduled stop at Estill Springs to take him on as a passenger.

"A railway pal of mine gave me five copies of *Railroad Magazine*, two months before he was killed in a shunting (switching) accident," writes John K. Blattman, railway signalman, 15 Constitution Rd., Wentworthville, New South Wales, Australia. "The magazines gave me so many wonderful hours of reading matter that I am now a subscriber and get every new issue as soon as it comes out."

With the score tied 4-4 and one out in an intra-squad baseball game at the Montana School of Mines, shortstop Dan Trbovich swung his bat. The ball cleared the unfenced outfield and sailed onto a passing ore train of the Butte, Anaconda & Pacific, which carried it to Anaconda, 24 miles away. The umpire ruled it a homer, and Trbovich's team won, 6-4.

"I collect, swap, and sell railway timetables from all over the world, especially European," writes Rafael Codol Margarit, 54 Mariano Cuiner, Igualda, Spain, "and I welcome new pen pals. I have friends in many lands."

"Carload Andy" Ospring, author of "They Burned Union Station" (Aug. issue), is being tape-recorded by Stan Repp, Box 654, Manhattan Beach, Calif., for a future recording of *Men of Steam*. "Carload" is a former locomotive engineer, having followed in the footsteps of his famous father, "Dutch Andy," on the old Vandalia line (now PRR). He lives at 1322 N. Ontario, Burbank, Calif.

"I've started to build an HO gage layout, 11½ by 4½ feet, based on the Colorado & Southern," writes Eric Lloyd, 25 St. Johns Rd., Hightown, Wrexham, North Wales, "but I need a C&S roster, pix, information. Will some American please help me?" ●

NEW RECORDINGS. Better by far than the average LP hi-fi disks of train sounds is *All Steamed Up*, recorded, narrated, and produced by a famous railroad artist, Howard Fogg, 2320 Balsam Ave., Boulder, Colo. We hear the excitement of eight steam engines at work on the Colorado & Southern in 1957, '58, and '59, with informal comments and even, at one point, the early-morning song of a meadowlark, trackside, just before a train roared by. In addition to photos, the jacket carries a large painting in colors by Fogg showing a train wheeled by CB&Q 5505, one of the eight locos. It's the kind of picture fans like to frame. The record, complete with jacket painting, sells at $5.95.

Local Freight, produced by Railfan Records, Wm. H. Bauer, 119 N. Birchwood Ave., Louisville 6, Ky., is the authentic LP hi-fi recording of B&O steam engine 332, train 87, on a run from Seymour to Vallonia, Ind., in Feb. '58, less than a week before steam vanished forever from the St. Louis Division. $4.98. Tapes also available. ●

RESTRICTIVE regulation is "one of the greatest deterrents to the nation's industrial progress," according to Walter J. Little, Vice President, Association of American Railroads, addressing the Pacific Coast Shippers Advisory Board.

Mr. Little cites the "phenomenal growth" of unregulated transportation as evidence of the damage inflicted on public carriers by the Government's "artificial restraints" in adjusting rates and services to modern needs. Already, about 35 percent of America's intercity freight traffic is now moving by unregulated carriers. Private companies operate three times as many trucks as the trucking industry itself!

"Unless Government's restrictive rate policies are changed to meet the realities of today, unregulated traffic will all too soon exceed that of regulated carriers."

While railroads must put up private investment funds for equipment, plant, and modernizations, "the Government pours billions into the development of the highways, airways, and waterways used by railroading's competitors." A sensible remedy for this competitive imbalance, according to Mr. Little, would be a system of "user charges" to be paid by commercial highway, air and water carriers for their private use of public-supplied facilities. ●

Don Bolander says: "Now you can learn to speak and write like a college graduate."

Is Your English Holding You Back?

"Do you avoid the use of certain words even though you know perfectly well what they mean? Have you ever been embarrassed in front of friends or the people you work with, because you pronounced a word incorrectly? Are you sometimes unsure of yourself in a conversation with new acquaintances? Do you have difficulty writing a good letter or putting your true thoughts down on paper?

"If so, then you're a victim of *crippled English*," says Don Bolander, Director of Career Institute. "Crippled English is a handicap suffered by countless numbers of intelligent, adult men and women. Quite often they are held back in their jobs and their social lives because of their English. And yet, for one reason or another, it is impossible for these people to go back to school."

Is there any way, without going back to school, to overcome this handicap? Don Bolander says, "Yes!" With degrees from the University of Chicago and Northwestern University, Bolander is an authority on adult education. During the past eight years he has helped thousands of men and women stop making mistakes in English, increase their vocabularies, improve their writing, and become interesting conversationalists *right in their own homes.*

BOLANDER TELLS HOW IT CAN BE DONE

During a recent interview, Bolander said, "You don't have to go back to school in order to speak and write like a college graduate. You can gain the ability quickly and easily in the privacy of your own home through the Career Institute Method." In his answers to the following questions, Bolander tells how it can be done.

Question *What is so important about a person's ability to speak and write?*

Answer People judge you by the way you speak and write. Poor English weakens your self-confidence — handicaps you in your dealings with other people. Good English is absolutely necessary for getting ahead in business and social life. You can't express your ideas fully or reveal your true personality without a sure command of good English.

Question *What do you mean by a "command of English"?*

Answer A command of English means you can express yourself clearly and easily without fear of embarrassment or making mistakes. It means you can write well, carry on a good conversation — also read rapidly and remember what you read. Good English can help you throw off self-doubts that may be holding you back.

Question *But isn't it necessary for a person to go to school in order to gain a command of good English?*

Answer No, not any more. You can gain the ability to speak and write like a college graduate right in your own home — in only a few minutes each day.

Question *Is this something new?*

Answer Career Institute of Chicago has been helping people for many years. The Career Institute Method quickly shows you how to stop making embarrassing mistakes, enlarge your vocabulary, develop your writing ability, discover the "secrets" of interesting conversation.

Question *Does it really work?*

Answer Yes, beyond question. In my files there are thousands of letters, case histories and testimonials from people who have used the Career Institute Method to achieve amazing success in their business and personal lives.

Question *Who are some of these people?*

Answer Almost anyone you can think of. The Career Institute Method is used by men and women of all ages. Some have attended college, others high school, and others only grade school. The method is used by business men and women, typists and secretaries, teachers, industrial workers, clerks, ministers and public speakers, housewives, sales people, accountants, foremen, writers, foreign-born citizens, government and military personnel, retired people, and many others.

Question *How long does it take for a person to gain the ability to speak and write like a college graduate, using the Career Institute Method?*

Answer In some cases people take only a few weeks to gain a command of good English. Others take longer. It is up to you to set your own pace. In as little time as 15 minutes a day, you will see quick results.

Question *How may a person find out more about the Career Institute Method?*

Answer I will gladly mail a free 32-page booklet to anyone who is interested.

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If you would like a free copy of the 32-page booklet, How to Gain a Command of Good English, *just mail the coupon below. The booklet explains how the Career Institute Method works and how you can gain the ability to speak and write like a college graduate quickly and enjoyably at home. Send the coupon or a post card today. The booklet will be mailed to you promptly.*

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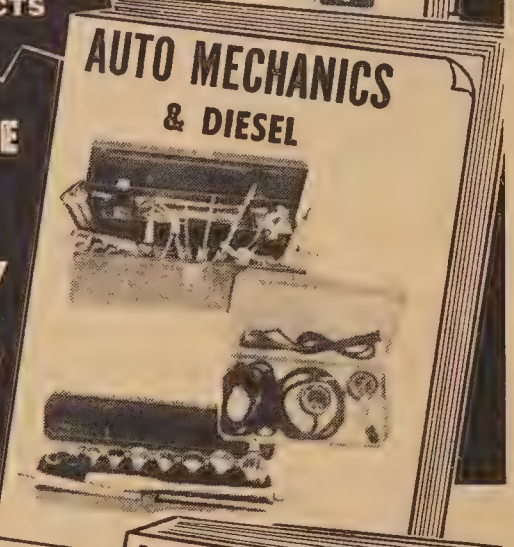

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Pennsylvania Railroad, which did more than any other road to develop the steam locomotive, no longer has any live steam power. Except for museum pieces and a very few serviceable engines held in storage, the lone survivor of a great heritage is No. 5244, an 0-6-0, Class B-6SB, built at Juniata shops in 1916, leased in her old age to Union Transportation Co., and shown here at Cream Ridge, N. J. But even she will have run her last mile before you read this. She is headed for the scrap pile.

NUMBER 5244

The Pennsy's Last Active Steamer

Camera Studies by David Plowden

Entire crew helps to load coal for the 5244, with the aid of conveyor belt operated by gasoline motor, at New Egypt, N. J.

Charles Horner, one of Union Transportation Company's 11 employes, is seen firing the engine at Fort Dix, N. J.

Conductor Radon walks back to caboose while train, with Fireman Horner at throttle, stops at Hightstown, N. J., crossing.

Three little railfans watch the train arrive at New Egypt from Fort Dix, possibly the last steam engine they'll ever see.

Leaving Fort Dix, U.S. Army post, the train runs occasionally to Davis, the end of railroad operation but not end of track.

Brakeman Faber protects the crossing at Richardson's feed mill in Davis. This mill is the sole reason for train service there. Tracks extends five miles further to Imlaystown, but the train hasn't run that far in nearly two years. (Right) Charles Horner shuts off plug after giving the engine water.

Union Transportation's only train and engine crew relaxes after putting the old girl to bed in the enginehouse at New Egypt.

Private Varnish on Shortlines

by LUCIUS BEEBE

Author of the new book "Mansions on Rails: The Folklore of the Private Railway Car," published by Howell-North Books, Berkeley, California—All illustrations from the author's collection

"Varnish," in case you don't know, is rail lingo for *passenger cars*. The president of the 62-mile Munising Railway had for his personal travel a magnificent private car, pictured here, No. 21, upholstered in tufted pigskin, with silver chandeliers.

Fern Ridge was photographed at Pullman, Ill., where it was built as a hunting car for the San Antonio & Aransas Pass.

Class 1 Carriers Have Never Had a Monopoly on Special Luxurious Equipment, Either in the Past or the Present

THE IDEA of a costly and elaborate business car for a shortline carrier must seem, at first consideration, a delusion of grandeur on the part of the management. Sometimes it was.

The function of an office car is and was, even in the Golden Age of Railroading, to furnish living and occupational facilities for executives at remote and inaccessible points along the railroad's property. The private car of bona fide non-railroading ownership was designed to provide luxury and prestige for the owner whilst traveling far away from home. Neither of these useful or luxurious functions were served by hauling or spotting a car along a carrier only 100 or at best 200-odd miles in extent. The very nature and existence of a private car presupposed a wider range of usefulness, geographically speaking.

And yet special equipment of this kind flourished mightily on the shortlines of the land no longer ago than the turn of the century. Even the years that saw the gradual decline of rail transport as a passenger medium witnessed the ownership or custodianship by shortlines of some remarkably opulent private cars.

In the case of purely official usage, a business car was a prestige symbol on a shortline's roster of passenger equipment. It gave a modest railroad a dimension of splendor comparable to the luxurious practices of the Pennsy or Union Pacific. A business car, especially in the days when the difference between business cars and private varnish was largely academic, was a fine thing to have around even if you couldn't really afford it, like a seagoing yacht or a Fifth Avenue address.

A railroad president or director, regardless of the size of his road, needed a private car the way he needed a Prince Albert coat and a gold-headed walking stick. Without one, there was some doubt of his status.

Such cars assigned to shortlines as their home railroad by private parties with only remote railroad connections, or none at all, were something else again. A shortline was glad to get the track rental and storage, besides being the originating carrier for safaris of interchange. It was nice, for example, to see its insigne on nameboards on the private-car tracks at Palm Beach or Louisville at Derby time. Shippers and business connections with private-car ambitions gratified them to mutual advantage by assigning their private varnish to the local or home-town carrier. One way or another, it was good for everybody concerned.

It must be remembered that the sharp demarkation between private and business cars is of comparatively recent origin. In the nineties, special equipment was more ambiguous. Railroad presidents and general su-

Chariots like SA&AP's *Electric* lent evanescent glory to shortlines in the 1880's.

Even a lumber road, the McCloud River, has Pullman-built business car No. 100.

The *Katharyne* was one of two splendid private cars on the 70-odd-mile WVC&P.

perintendents did not hesitate to speak of their official cars as private cars. Many of them were so designated on doors and nameboards. Jay Gould or Jim Hill would have scorned the implications of subservience in calling their private varnish a business car, even though it was. Cheap gestures of democracy on the part of big business were yet in the unforeseen and deplorable future.

Often enough a railroad president owned his fine Pullman outright as a personal chattel in fee simple. He wasn't responsible for its conduct to directors or stockholders, and what was to be gained by the evasive euphemism of *business car*? Only in recent times have rail executives been touchy over the use of the term *private car*.

The first private cars in the record, where they appear as such without equivocation, were built, mostly in the company shops, for ranking officials of mainline carriers shortly after the close of the Civil War. The Erie maintained a fine car, No. 200, for Jay Gould when he assumed the presidency of that ill-fated road in 1868. At about the same time Tom Scott, president of the Pennsylvania, had a nice car, No. 120, outshopped for his personal use, while private cars for Jack Casement and Charlie Crocker turned up in construction times on the Union and Central Pacific respectively. Three private cars were parked at Promontory for the "wedding of the rails" in 1869.

In the eighties, special equipment began to lend a glory to shortlines, sometimes disastrously. Take, for example, the San Antonio & Aransas Pass, running some 200 miles between the Texas capital and Aransas Bay, a vicinage still noted for its tarpon fishing. Directors commanded from Pullman a splendid mahogany car with two open platforms, in the style of the time, and to show an awareness of progress they named it *Electric*. Then General Manager B. F. Yoakum yearned for something nice in the varnish line, and Pullman obliged with *Rubio*. The builder's photograph showed it at the town of Pullman, Illinois, with a large black dog in the picture.

Enchanted with the social eclat accruing from these splendors, and learning that the neighboring Pecos Valley Railroad had ordered an even more magnificent private car named *Hesperia*, the Aransas Pass management commissioned Pullman to build a hunting car, the *Fern Ridge*. This one took a page from the book of Jerome Marble of Worcester, Massachusetts, who was then building and renting hunting cars for use in the West with such success that he numbered among his patrons the Grand Duke Alexis of Russia and the British Duke of Sutherland. The Aransas Pass sports model was furnished with four cast-iron beds as well as wide baggage-type doors for the easy egress of occupants with fishing gear and guns.

To haul this opulence, the management ordered motive power liberally from the New York Locomotive Works at Rome, New York, and presently the San Antonio & Aransas Pass Railway went broke, defaulting on its bonds in 1891. Failure to pay for its engines hastened the bankruptcy of the New York Locomotive Works.

General Manager Yoakum went to greater destinies with the Frisco. With such a name emblazoned on it, Jay Gould couldn't resist acquiring *Electric* for his Western Union Telegraph Company, and sheriff's writs against such Texas names on the board of directors as Sam Maverick and Reagan Houston put the snatch on the *Fern Ridge* and the *Rubio*.

Eventually the Southern Pacific picked up the pieces of the SA&AP, but the glory was gone and its decline was pointed out as a monument to the folly of too much private varnish on a 200-mile carrier.

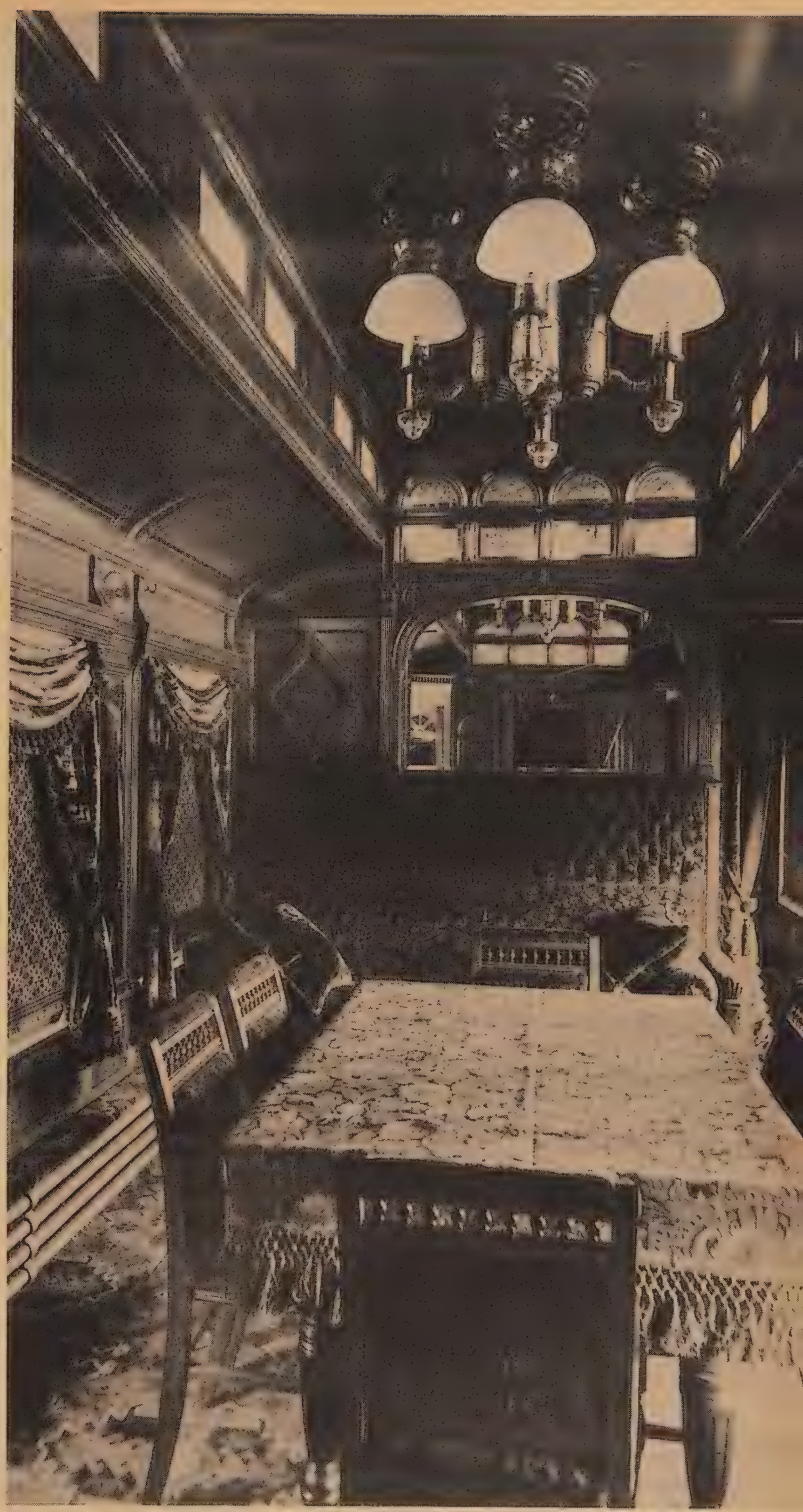
Well to the north of the Rio Grande and operating in more flour-

ishing circumstances was the rich and well-managed West Virginia Central & Pittsburgh Railway, whose 70-odd miles of right-of-way between Piedmont, West Virginia, and Elkins is now part of the Western Maryland. The WVC&P was a fine example of a shortline which boasted two magnificent private cars, one carried on the company books and the other being the property of R. C. Kerens, a well-to-do director from St. Louis. In 1894, Mr. Kerens commanded Pullman to build him the *Katharyne,* an all-mahogany car with enclosed front platform in the new style and looped and fringed drapes, inlaid woodwork, and silk portieres beyond counting. The WVC&P, in order that its president, H. G. Davis, might travel in fashionable privacy, maintained another private chariot, the *West Virginia,* whose ancestry is unknown to the writer.

That coal-haul presidents traveled in the best society is indicated by the books of the Florida East Coast, which on March 16, 1894, accepted the *West Virginia* in interchange, with "H. G. Davis & Party" aboard, and delivered them to Palatka, Florida, a resort of contemporary fashion at a time when Palm Beach was just getting under way.

All Florida lines of the period, including the Florida Southern and the Plant System's Savannah, Florida & Western, had on their roster private cars of varying degrees of magnificence, most of which turned up at one time or another as guests of the FEC.

In Michigan, the Munising Railway was chartered in 1895 to run 38 miles between Munising and Little Lake, with 24 miles of branch lines. This microscopic outfit was controlled by the Cleveland-Cliffs Iron Company, which had immense iron interests in the region and could well afford the extravagance when, in 1901, it ordered from Pullman a costly private car, numbered 21, for the use of its president, William G. Mather of Cleveland. No. 21 was upholstered in tufted pigskin, with silver lighting fixtures. Its interior accommodations, generally speaking, were comparable to those in the



The little Pecos Valley Railroad boasted the magnificent private car *Hesperia.*

cars of William C. Whitney, Charles M. Schwab, James Hazen Hyde, and Thomas Fortune Ryan, all of which Pullman outshopped in the same vintage year for private varnish.

Out West, distances were greater and millionaires more spectacular. Shortlines with mining backgrounds in Nevada, California, and Utah flourished green-bay-tree-like and produced a notable quota of special equipment, much of it home-made in company shops.

In plenty of time to show it at the railroad pavilion of the Philadelphia Centennial Exposition, Peter Donahue of the California Pacific Railroad in northern California had a "private palace car" built by the Union Iron Works at San Francisco.

Milton Latham's narrow-gage *Millwood* exemplified the glory of the North Pacific Coast, while over in Nevada the swaggering Virginia & Truckee was building at its main shops in Carson City a similar conveyance for its general manager, Henry Yerington, who had about the finest display of whiskers in Nevada.

Mr. Yerington's private varnish was rebuilt from a coach purchased from the Central Pacific in 1876 for $2,500. It came onto the railroad scene shrouded in mystery and departed the same way. That it existed at all is evidenced by a letter from Mr. Yerington, in the Nevada State Museum, reading: "My private car is now in the East at the disposal of John Mackay, the richest man in the world." Nobody knows what happened to the V&T official car after that.

Nearly three-quarters of a century later, the V&T was briefly and in its final year of operation the home railroad for *The Gold Coast*, owned jointly by Charles Clegg and your author. This car had been purchased from another shortline nearly 3,000 miles away, the Georgia Northern.

The V&T's narrow-gage subsidiary, the Carson & Colorado, running between Mount House, Nevada, and Owens Valley, California, had in its years of teem an official car, the *Esmeralda*, which finally ended its days on the ground as a summer house in Owens Valley. When the C&C was acquired by the Southern Pacific shortly after the turn of the century, it also boasted a second three-foot official car that somehow had strayed from the Nevada-California-Oregon Railroad.

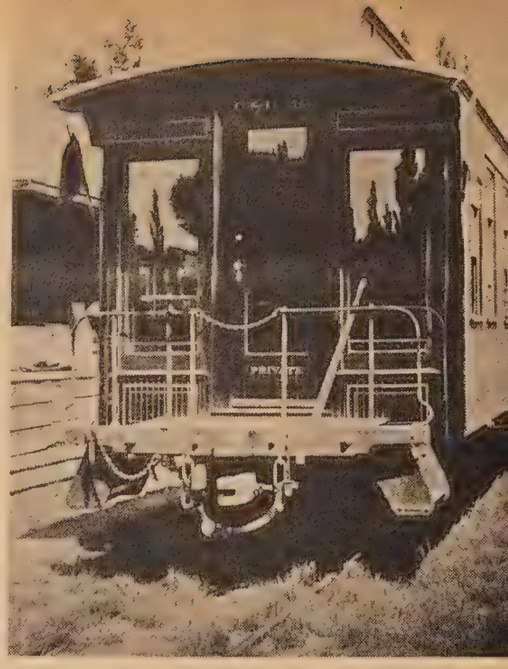
Another narrow-gage private car, the *Silver State*, for all its august ownership looked like only a slightly-more-than-usually elegant passenger coach. This conveyance of a New York millionaire, Anson Phelps Stokes, who owned the Nevada Central Railroad, connecting with the Central Pacific at Battle Mountain and with the booming silver town of Austin at the other end.

The surprisingly austere *Silver State* was pressed into service whenever owner Stokes chose to journey West to survey his properties. It survived the vicissitudes of time to play the role of the Central Pacific's *Stanford* in the railroad pageant staged by Gilbert Kneiss at Treasure Island in 1938. Like *The Gold Coast*, it now reposes among the historic properties of the Railway & Locomotive Historical Society, West Coast Chapter.

In the southern deserts, the Tonopah & Tidewater is known to have had a business car, although, like the properties of many abandoned carriers, its origin and details of construction have vanished over the years.

The neighboring Ludlow & Southern, running 7½ miles between Stagg Post Office and Steadman, California, operated a business car, No. 100, that has become a legend of magnificence in the region it once knew. No. 100 was reputed to have been at one time the presidential car of Chauncey M. Depew on the far-off and lordly New York Central, but since it is hard to conceive of Mr. Depew using a combination baggage car and coach on his business occasions, this seems improbable. Its furnishings, including a mahogany roll-top desk and finely-wrought brass lighting fixtures, were uncommonly beautiful and ornate.

At least two California shortlines have had p.v. on their equipment rosters in recent years. The Santa



Narrow-gage Carson & Colorado had a business car named *Esmeralda*, shown at Hawthorne, Nevada, in about 1905.

Maria Valley, a 15-mile feeder for the Southern Pacific, picked up the Espee's once splendid business car *Arizona*, that Pullman had built years before for the El Paso & Southwestern, while in 1913 the McCloud River Railroad, a still-operating lumber carrier, ordered from Pullman a business car conventionally numbered 100.

Prize collector of varnish equipment in the Far West, however, was the Nevada Northern, a rich copper-haul road once dominated by the Guggenheim interests. Its insignia has variously ornamented the nameboards of Solomon Guggenheim's strictly private car *Nirvana*, the Pullman-built company business car *Ely*, and two gorgeous Pullman-built private chariots, each named *Cyprus* and owned (one at a time) by Colonel Daniel C. Jackling of Utah copper fame. The *Ely* was sold to the Gulf, Mobile & Ohio in 1937 and used by its president, Isaac B. Tigrett.

Colonel Jackling's number one *Cyprus* passed into the hands of Julius Fleishman and is now the business car *Hopedale*, of the Pittsburgh & West Virginia, which also owns the one-time private varnish of Henry Frick, steel tycoon. Second *Cyprus* went to the United States War Department during the Kaiser War.

Perhaps the ranking contemporary

private-car shortline is the Georgia Northern, a feudal property of the Pidcock family, which also owns two other shortlines in the neighborhood of Moultrie, Georgia. Until a few years ago Mr. Pidcock's private varnish was an authentic veteran, the *Moultrie,* that in primeval times had been the property of Henry M. Flagler and named the Indian River Railroad as its home carrier.

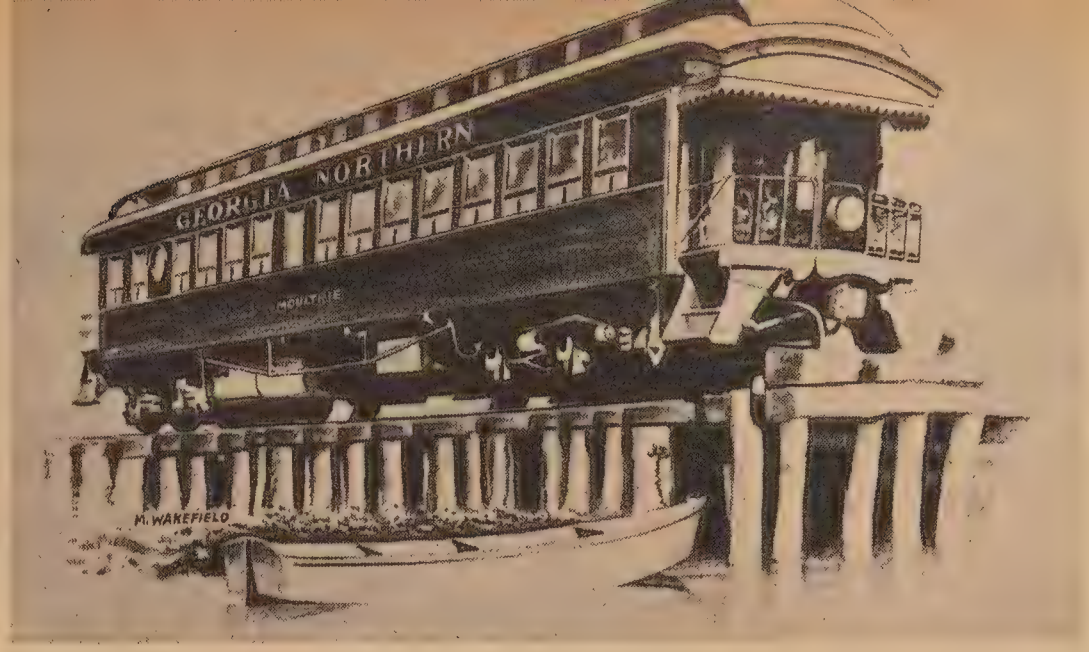
When in the course of time the *Moultrie's* wooden underframe rendered it not available to main-line interchange, Mr. Pidcock purchased from the Central of Georgia its office car No. 98, built in the company's Savannah shops in 1907. This eventually became *The Gold Coast,* with lavish new interior decorations and furnishings, that is now, by the gift of former owners Clegg and the author, the property of R&LHS, West Coast Chapter.

Meanwhile, finding that he couldn't live without a private car, Mr. Pidcock bought from the Chicago & Eastern Illinois its Pullman-built office car *Mount Vernon,* which now adorns the Georgia Northern as the second *Moultrie.*

Other shortlines within the memory of the oldest inhabitant have had business cars of varying degrees of elegance and austerity. The 46-mile Mississippi River & Bonne Terre, operating in mining country south of St. Louis, had American Car & Foundry build for its directors an uncommonly comely wood-sheathed palace car, the *Linares,* which popped the eyes of Ozark rustics for many years.

The Tennessee Central rejoices in the *Palm Beach,* built by Pullman in 1916 and reported to have been under lease to Mary Pickford in her days of silver-screen ascendency. Years ago, the Atlanta & St. Andrews Bay acquired a Florida East Coast official car and subsequently sold it to Mike Duffey, general manager of the Central Indiana.

For a brief interregnum while the Chesapeake Western was without a depot or offices at Staunton, Virginia, its general manager, D. W. Thomas, directed the company's operations from the former *Moultrie* of the Georgia Northern, which before that had belonged to Flagler. Mr. Thomas finally set the venerable relic on the ground as his summer house at Harrisonburg.



(Top picture) The first of two Georgia Northern cars named *Moultrie.* Replaced by p.v. that eventually became *The Gold Coast,* owned jointly by Lucius Beebe and Charles Clegg, finally given by them to railfan club. (Lower) Second Moultrie.

The Mississippi Central has an oldtime business car stored in the company shops at Hattiesburg, Mississippi, while the Georgia & Florida, perhaps not a simon-pure shortline, is reported to have maintained a car of some elegance until recent years. The Cincinnati, Indianapolis & Western at one time used Indianapolis No. 07 for its ranking personnel and directors.

Before concluding this brief and by no means definitive survey of shortline private varnish, let us pause to salute Charles M. Schwab's second private car, *Loretto,* built to the ironmaster's personal specifications by Pullman in 1916 after Schwab had retired his first car of that name. *Loretto II* is now the personal, private conveyance of Colonel Elliott White Springs, president of the Lancaster & Chester, a shortline serving the vast Springs cotton mills in South Carolina.

The L&C has a somewhat unusual board of directors that includes James Montgomery Flagg, Lowell Thomas, Gypsy Rose Lee, and the author of this chronicle and it occupies half a page in the *Official Guide.* Because of its outmoded draft gear and brake rigging, *Loretto II* never leaves the rails of its home railroad, but Colonel Springs has a great deal of pleasure out of it.

So there you have it. The great era of private palaces-on-wheels may have passed into limbo. But (despite the relative immobility of *Loretto* 11) nobody can say that shortline private varnish didn't get around. ●

MIKADOS

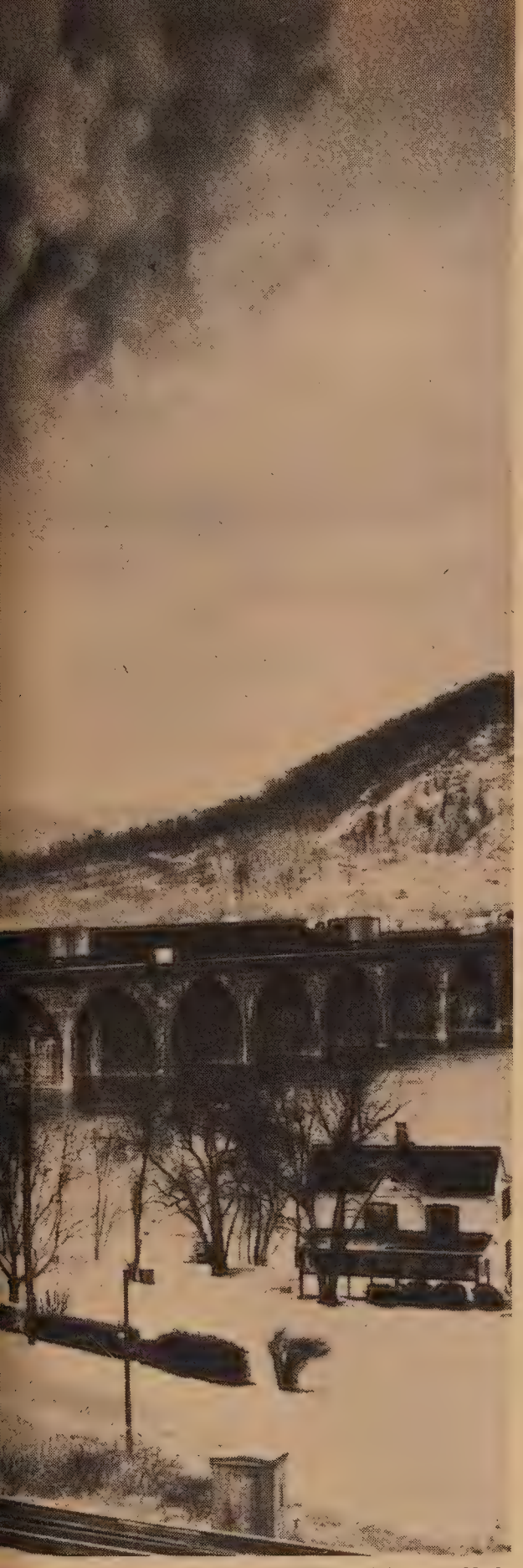
by H. L. KELSO

A Pennsy 2-8-2, No. 1627, Class L-1, has just crossed Susquehanna River on way from Harrisburg to Enola (December, 1955).

YEARS AGO, when you were very young, did you ever see a man board a passenger train with a grip in one hand and a scoop shovel in the other? Such sights were not uncommon around World War I. The man was not a grave-digger but a locomotive fireman deadheading on company orders to a distant terminal where he was needed to substitute, or to take over a run.

As I remember, just about every ashcat toted his badge of servitude with him in those days, no matter when or where he was called for work. The scoops were chosen for balance, weight, and size. I had a beauty. Only once did I find it wanting. That came about on a chilly winter night in the mid-teens when I was called from the extra board of the Omaha Road in Sioux City, Iowa, to alleviate the dearth of firemen on the main line out of Council Bluffs.

In those days I never knew where I'd go next. One day I'd get a job off the board on my own division, and 48 hours later I might be firing on the Great Northern, for most roads



Don Wood, 29 Mt. Haven Drive, Livingston, N. J.

were short of help now and then and borrowed men from one another. The "foreign" roads would pay us at the end of each trip, which was good, for somehow a fireman rarely had enough money to tide him over till the next payday.

Arriving at Council Bluffs, "my scoop and I" climbed into the cab of the biggest and heaviest hog I'd ever been called to fire. She was a Mikado. Peering into her monstrous firebox, I could see a tough job cut out for me. The engineer, grumpy about having to go out with a borrowed fireman, glared at my trim, medium-sized shovel.

"What are you going to do with that toy?" he asked. "Get yourself a larger scoop!"

After a mild argument, the hogger marched over to the storeroom himself and brought back the biggest scoop shovel I've ever seen. He rested it against my seatbox without a word, and there it stayed.

Well, sir, we had a time-limit consist of livestock bound for Chicago and when we left Council Bluffs plenty of cinders were blasting up from the stack. A few miles out, the steam dial began to lag and I shoveled black diamonds faster than I'd ever shoveled before.

The 2-8-2 was a pretty fair steamer, but apparently the engineer aimed to teach me a lesson. He looked at the steam gage and pointed to the huge scoop that would heave more coal into the cherry-red flames.

I took the hint, picked up the gargantuan shovel. A few miles eastward the gage edged up to the howling point (safety valve popoff). By the time we reached Carrol, Iowa, I had the big Mike on my hip, and the engineer and I were fast friends. Such was my introduction to the 2-8-2.

Until recently I had thought that the name of this type came from the fact that Baldwin built the first 2-8-2 in 1897 for the Japanese railway system, the name being intended to honor the Mikado, or Emperor. That is the commonly accepted legend.

But I found a news item in an 1893 issue of the *Locomotive Engineers Journal* saying that Brooks Locomotive Works (now Alco) was then building a 2-8-2 for immediate use! Well, in March of that year Brooks actually turned out not one but four 2-8-2's, all for the Chicago & Calumet Terminal (now in the Baltimore & Ohio system). I wonder why the 2-8-2 did not win fame as the *Calumet* type rather than as the curious-sounding *Mikado* type.

This breed has two wheels approximately under the smokestack, eight driving wheels, and two trailer wheels beneath the firebox and cab. Because Japan fought on the wrong side in World War II, the Central of Georgia, B&O, Southern Pacific, and a few other roads discarded the Mikado designation and used the name *MacArthur* instead, in honor of the General; but, like old soldiers that "just fade away," the new name gradually dropped out of motive power classifications.

The Central of Georgia used Mikes from three major builders, beginning with Brooks in 1903, the year before the Northern Pacific became the first big American road to adopt 2-8-2's for first line freight service. Baldwin built the Georgian Mikes in 1912 and '25, and Lima built others between 1915 and 1924.

Also in 1903 the Denver & Rio Grande (now D&RGW) received eight compound narrow-gage Baldwin Mikes with 40-inch drivers, but after using them briefly sold one to the Rio Grande Southern and two to the National of Mexico. In 1925 Baldwin delivered bigger Mikes, with 49-inch drivers, to D&RGW. A rebuilding feat occurred when D&RGW converted ten standard-gage 2-8-0's to narrow-gage 2-8-2's at Denver in 1928-'30.

Meanwhile, in 1923 Alco had built ten slim-gage 2-8-2's for the same road, which sold six of them to the White Pass & Yukon in 1943. The D&RGW's alltime roster lists only 15 standard-gage Mikes.

Lehigh Valley boasted some rather weird-looking double-cab 2-8-2's—call 'em Camelbacks or Mother Hubbards, as you prefer.

Between 1904 and 1907 the Northern Pacific "launched" a total of 160 Mikados, all Alco-built with 63-inch drivers. As recently as nine years ago 80 of these were still active. One, No. 1844, wheeled a freight all the way from Seattle to St. Paul without once uncoupling her train! This prodigious feat took motive power officials by storm and led the way to longer daily locomotive mileage on some Western roads. Until

the advent of 4-8-4's in 1927, the 2-8-2's were the heaviest and most powerful engines on the NP system.

Wesley Krambeck, of Herington, Kan., gives details of an accident that could have fitted into Bob Ripley's *Believe It or Not.*

Says he: "A Missouri Pacific Mikado, No. 1432, was pulling a westbound freight some 40 miles east of Herington at about 40 mph on May 12, 1934, when her boiler let loose. Crown sheet and side sheets fell into the firebox, grates were torn to bits, and Duplex stoker engine, booster, and trailer wheels were hurled hundreds of feet from the track.

"Tender and 11 cars piled up, the wreckage burning up. But that isn't all. No. 1432, sans tender, shot ahead some 600 feet with only pony wheels on the rails. Dirt and pebbles spewed over the engine made her an ugly mess. The explosion cleared all vegetation from the ground nearby and entangled a clinker hook into the telegraph wires so intricately that only an expert with a heating torch could separate them. But nobody was killed. The engineer, fireman, and head brakeman riding the cab were only slightly bruised and shaken up."

Another odd story comes from C. A. Cunningham, who was a Northern Pacific fireman in the Steam Age and who one night was firing a Mike, No. 1505, for Engineer Frank Davis on an eastbound berry train.

"On a sharp curve near Eagle Gorge, Wash.," he says, "we felt a jolt as if our trailer wheels had hit something. We stopped, but found nothing wrong. You can overlook a lot when you're scouting around with a torch in a hurry. Anyhow, we wired ahead to Lester, asking the roundhouse foreman to check our engine while we were taking coal and water. But nothing wrong showed up there.

"We made the 104 miles from Auburn to Ellensburg in about three hours. At the end of the run Davis said: "Get up on the guide with my torch, Cunningham, and see if you miss anything."

"Well, I did. My hair stood up when I found the left front driving spring gone! The equalizer hanger connection to the spring had broken, dropping the spring down to the track. We quickly reported the loss, as a driver spring is a big piece of iron to be lying around on a railroad. Luckily, it had fallen flat; three trains passed undamaged over it before the section men found it. We never did understand how the engine had ridden so well or why the driving boxes had not been overheated or why we hadn't been wrecked."

Now look at Canada. Canadian National's 2-8-2 history began in 1913 when Alco and Baldwin Mikes went into service. The alltime roster lists a total of 466 Mikes, all having 63-inch drivers. However, six were rebuilt into 0-8-2's. Three Mikes

John F. Boehner, Box 9721, Hickman Mills 34, Mo.

A Mike working today is Burlington No. 4955, leased by the Bevier & Southern. (Left) Floyd Kilgore, hostler, boarding engine, sees his own reflection on the tender, made shiny by water-tank overflow. (Right) At mine near Bevier, Missouri.

were built in the company's own shops; the others came from Canadian Locomotive Co., Montreal Locomtive Works, Baldwin, Alco.

A retired Canadian National engineer, Bill Parry, recalls the following experience:

"I was wheeling a big Mikado in the third section of a fast freight, speeding through Boswell, Ont., at 60 mph, when the main rod on my side suddenly broke in two. I was barely able to duck behind the boiler before splinters of window glass cascaded into the cab. The huge main reservoir, sailing past the shattered casement, rolled over the right-of-way fence. The fireman shouted, 'Give her the big hole,' but she'd already done that herself, the air pipes having gone.

"When we finally stopped, the engine's right side had been stripped clean. With the help of a section gang we gathered up the broken parts and loaded them onto the pilot, centered the valve on the disabled side, straightened the reach-rod, and took the engine, light and without airbrakes, 50 miles into London."

The Canadian Pacific's first 20 Mikados were built in 1912 by the road's own shops. In 1913 Canadian Locomotive Co. delivered 75 more 2-8-2's. Then CPR built ten heavy Mikes, and after that until 1948 new and improved 2-8-2's from Canadian Locomotive Co. and the Montreal Works were put into service.

Prior to 1910 the Consolidation type was North America's most popular freight-hauler, and CPR had scads of them. But, liking the Mikado so well, they rebuilt many of the old clunkers into stoker-fired 2-8-2's in their own shops in 1947 and 1948.

(A rare rebuilding case involving a Mike occurred a few years back when the Wabash converted seven 3-cylindered Mikes into fast 4-6-4's.)

All CPR Mikes, like those on the Canadian National and NP, had 63-inch drivers. Pacific Great Eastern received 2-8-2's from Canadian Locomotive Co. in 1947. Many engines of this type are still active in Canada but running on borrowed time.

Turn now to the B&O, on a predecessor of which the 2-8-2 seems to have started, as I have pointed out. The first two Mikes to run on the B&O itself were originally Alco 2-8-0's (*circa* 1910) but in 1911 were shipped to Baldwin in Philadelphia to be converted to 2-8-2's. From that year on the B&O acquired Mikados in flocks. Eight Limas built in 1916 joined the roster when B&O took over the Cincinnati, Indianapolis & Western, and 121 Mikes came to the B&O with the Buffalo, Rochester & Pittsburgh.

The B&O had the distinction of owning four Mikes with 70-inch drivers, the largest diameter ever applied to this type in North America.

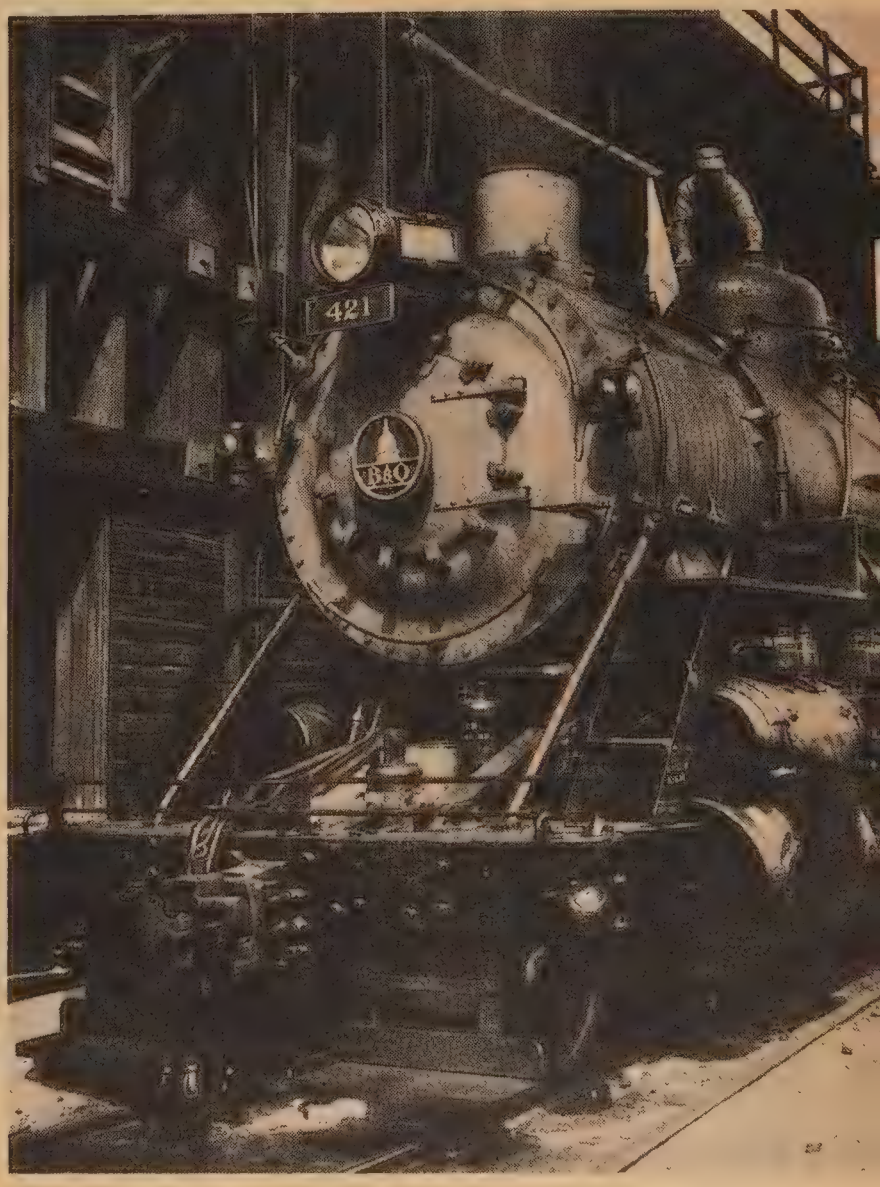
Great Northern's fleet of Mikados, all built in company shops between 1929 and '32, had 69-inch wheels. The last three weighed 367,000

David Plowden, 1239 Madison Ave., New York City

A sight you'll never see again: Great Northern No. 3387, a Mike, heading east to Minneapolis, climbs grade at 10 below.

Don Wood

Holloway, Ohio: hostler puts cover on sand dome of No. 421, a 2-8-0, which made last B&O steam run, a fantrip in 1958.



pounds and rated 78,000 pounds tractive effort, being topped only by Frisco Mikes for locomotive weight (without tender).

In 1952 the B&O had, in all, 1275 steam engines, 418 of which were 2-8-2's. The alltime roster actually lists more than 418, as some of that type were rebuilt into 4-8-2's (Mountains) in the early 1940's.

The Pennsylvania Railroad, which led our planet in developing the steam locomotive, created its first Mikado in 1914, along with its great Class K-4 Pacifics. Many appurtenances, appliances, and parts were interchangeable and the boilers were identical.

Pennsy listed 586 Mikes on its alltime roster, an American record. This fact alone should prove conclusively the value of 2-8-2's. The Pennsy Mikes were built by Alco, Baldwin, Lima, and their own shops at Juniata and Altoona. Drivers on many of them measured 62 inches.

The Pennsy's numbering system for Mikados was odd, to say the least. For instance, one carried a two-digit number such as 25, another was 8191. Nobody seems to have guessed how the system was arrived at. Incidentally, No. 8191 and two other Mikes ran their last miles on the Santa Fe, having been bought by that road during World War II.

In 1902 the Santa Fe activated 15 Vauclain compounds (Baldwin) with 57-inch drivers and 18x30x32-inch cylinders but in 1908-'09 rebuilt them to two-cylinder engines in the Topeka shops. These served as guinea pigs for later Mikes which appeared abundantly on the Santa Fe, starting in 1913.

Between 1911 and 1957 the Southern Pacific used Mikes continuously, although for a while it called them MacArthurs. The SP's last two 2-8-2's were assigned to the Coast Division, working way freight out of San Luis Obispo, California.

Illinois Central regarded Mikados as the best dividend-paying engines in its history. Some 40 percent of the IC's alltime roster were 2-8-2's. These were in service not merely because some official had "loaded up" on the type; they were real assets. The IC is a fairly level road, devoid of heavy grades, long tunnels, and sharp curves, and thus is well suited to the use of high-speed, rigid-framed engines. In 1952 the IC listed some 1100 steamers, 444 being Mikados.

But our continent had no corner on 2-8-2's. More than 1000 American-built Mikes plied the rails on a single French line. Other 2-8-2's ran in nearly every important country on the globe. However, even in the United States not all Class 1 roads used Mikes. The non-Mikado list included the Norfolk & Western, Boston & Maine, Central of Vermont, Delaware & Hudson, Richmond, Fredericksburg & Potomac, and New York, Ontario & Western.

Mikado No. 1977 ended New York Central steam operation when she pulled into Cincinnati in May, 1947. Another 2-8-2, No. 4018, terminated the Steam Age on the Frisco by tying up at Birmingham, Ala., after a round trip from Bessemer. Incidentally, Frisco had the world's heaviest Mikes.

Still another, No. 800, highballed the Texas & Pacific's last steam train from Shreveport, La., to New Orleans in November, 1951. But a year or so after T&P had declared itself fully dieselized, the rampaging Red River inundated its tracks in Louisiana, killing diesel traction motors. T&P sent a frantic call to the Fort Worth & Denver for steam power.

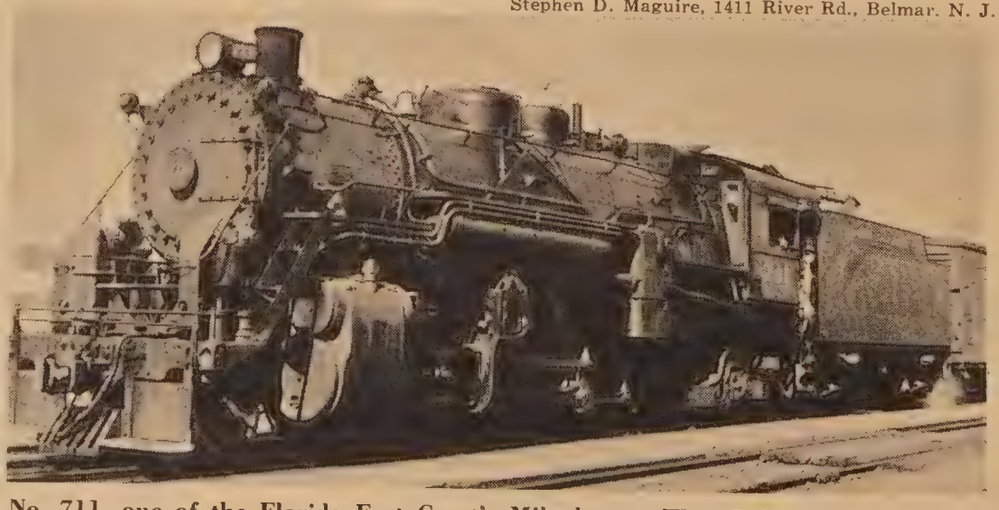
Let it be recorded that the Fort Worth road sent a mighty Mikado, No. 410, which handled 160-car trains through the flooded area without undue delay.

Because of her grand performance, Texas & Pacific bought the 410 and renumbered her 400. But where is the 400 today? Where, in fact, are any of America's great Mikados, aside from the pitifully few being kept in standby service, or those exhibited as museum pieces?

R. R. Malinoski, 246 Madison Ave., New Milford, N. Y.

D&RGW No. 476 with Rocky Mountain Railroad Club special, June 2, 1957.

Stephen D. Maguire, 1411 River Rd., Belmar, N. J.



No. 711, one of the Florida East Coast's Mikados, at West Palm Beach in 1941.

Montana's Only Interurban

by PAUL BUSCH

GVE, on which this freight motor ran, is now branch of the Milwaukee.
Collection of Thomas T. Taber, III, Box 164, Muncy, Pa.

THREE FORKS, Montana, is famous on several counts. It's the starting point of the world's third or fourth largest river—more precisely, the place where three fast-running tributaries, or forks, rush together in a rowdy brawl to form the turbulent Missouri.

Forty-eight years ago it became the western terminal of the first mainline railroad division ever to be electrified. Never before in history had a juice locomotive completed a run of more than 100 miles in regular service. And today the Milwaukee Road stops a great transcontinental train, the *Olympian Hiawatha*, at Three Forks for passengers bound to and from Yellowstone National Park.

Cradled high in the Rockies, this town lies 1,450 miles west of Chicago and at the foot of three outward-reaching valleys: the Jefferson, the Madison, and the Gallatin. From Three Forks you can go directly up the Gallatin Valley to Yellowstone Park, the 900,000-acre Gallatin National Forest, or the city of Bozeman.

Today you reach those points by bus. But long ago you might have gone by rail, and this is the story of Gallatin Valley Railway and its predecessor, The Gallatin Valley Electric Railway, which began operating in late September of 1909. I worked on that line for twenty-one years. I was, in fact, its first motorman, and now, living in retirement near Bozeman, I am the last survivor of its original employes.

The company was formed at the peak of the interurban craze and I operated its only interurban car. We were more than a transportation service. Everyone in that area knew us and we knew them. When a farmer, for example, couldn't get into town to buy a small machine or match a piece of cloth we would fill his order on our run into Bozeman. During our layover we'd make the purchase and on the return trip we'd drop it off. Of course, bigger merchandise was shipped by express, but we handled the little items as personal favors.

One day somebody wanted a morning paper delivered at his farmhouse, and soon I was throwing off two dozen or so papers a day along the line. I became expert at hitting the mark as we rolled by at 30 or 40 miles per hour. In winter the customers occasionally had trouble finding their papers in deep snow —some papers couldn't be found at all until the spring thaw.

My seniority began in 1909, the year the Milwaukee (then known as the St. Paul Railroad) finished laying rails from St. Paul to the Pacific, incidentally missing Bozeman by nearly 40 miles, which in railroad strategy was a glaring mistake.

Bozeman and Three Forks stood at opposite ends of the rich Gallatin Valley, and ever since 1883 the Northern Pacific main stem had been serving both towns. Bozeman is the larger. Laid out in 1864, in Civil War days, Bozeman is Montana's oldest community. It was there in 1892 that the state's first trolley cars began burnishing the rails and there in 1908 that the Gallatin Electric Railway Company was organized to build and operate the state's only interurban line.

Understandably, the Milwaukee road wanted an entry into Bozeman. The interurban had been building less than a week when we noticed a drifting in of "Milwaukee money." But that, for the moment, is another story.

The electric line was built because, for one reason, a farmer named Charles Anderson, living in the upper valley, showed the way. Every summer for years Anderson had faced the problem of hauling his cattle and wheat to the Northern Pacific freight yard at Bozeman and, like all the farmers thereabouts, he recognized the need for rail service into Bozeman. Then in about 1908 he caught the interurban fever and expounded the subject to neighbors for miles around.

A big, hearty fellow, somewhat of a politician, Anderson soon got the upper valley interested. Lawyers and business men joined in. So did Congressman Hartman, who swung a lot of weight. Together they organiz-

ed the electric railway. Farmers along the route donated land for the right-of-way and subscribed for capital stock, while Bozeman folks persuaded a financial group at Spokane, Washington, to buy a substantial block of it. We were told that the cash from Spokane was Milwaukee money.

Back in 1909 it cost $300,000 to build the Gallatin Valley Electric Railway. A group of New York interurban specialists got the contract, supplied the engineering know-how, and farmed out the labor to a local contractor, Emmet Burke. Work started in April. With no large cuts or fills, the whole sixteen miles of line was completed in five months.

In one sense, GVE was not really an interurban. The common factor that set apart interurbans from other rail lines and explained their astonishing success was their operating *between* or *among* urban areas, skimming through the intervening countryside. But the region served by GVE had only one sizeable town. The tracks beginning at Bozeman simply stretched out for sixteen miles, which from a railroader's viewpoint was not a good idea.

We began rolling in September. For passengers we had the interurban car—a combination mail, express, and passenger job. Not a big one. And for freight we used a box-cab motor powerful enough to haul six or eight loaded cars as well as room inside for less-than-carload lots.

One of our best assets was an agreement with the Northern Pacific to interchange freight. But we couldn't reach NP rails without passing through Bozeman, and to do that we had to buy the trolley company. So, almost from the start, GVE had two separate forms of transportation, a streetcar system and an interurban line.

The latter was laid from the outer edge of Bozeman eleven miles westward to Bozeman Hot Springs, which had probably less than a score of homes, and thence five miles south to Salesville (now called Gallatin Gateway), population about 300. The Springs was a deserted health resort lapsing into nothingness when the electric railway revived it.

For the rest there were forests and farmland and one small sheep range that employed an old herder named Charlie. More about him later. It was a common jest that if all the farm people living in that area had gone into Bozeman together they could have ridden in the one small car.

Just the same, we hauled freight when the wheat crop was in and when farmers shipped cattle, but for long periods of time I saw the freight motor pull out of Bozeman day after day with nary a car tied on behind and only a few packages inside.

Then something happened. In early summer the St. Paul Railroad began building a line up the valley from Three Forks to the Springs, 27 miles, and in September they incorporated the Gallatin Valley Railway, wholly-owned subsidiary. The first train ran between the two points October 31st. Next morning the new company took over the Gallatin Valley Electric. Thus the big system found its entry into Bozeman.

The GV was a steam road with a few coaches and two eight-wheelers obtained from the parent company. It never made much profit. Its passenger service could not compete with the faster and more comfortable Northern Pacific trains, but it drained a good flow of freight onto the rails of what is now the Chicago, Milwaukee, St. Paul & Pacific, thus earning for the parent road revenues that exceeded the running expenses.

The new company gave Bozeman a fine passenger station of yellow brick. During its first year, too, it pushed the end of track beyond Bozeman through 25 miles of wheat country to Menard, and before the end of 1912 it boasted 75 miles of line, including a five-mile branch to Belgrade, NP shipping point. As a separate enterprise this outfit ran the Bozeman trolley cars until the economic pressures and upsets of World War I forced their abandonment.

Charlie watched over the only flock of sheep in the valley. He'd spend most of the time with his flock in the mountains, but around December first he'd turn up with a pocketful of money and buy a round trip to Bozeman. The conductor, knowing the old man's habits, would punch the going portion and keep the rest of the ticket, lest Charlie lose it.

At Bozeman the herder would disappear. But a week later, sure enough, he'd be waiting at the depot, bleary-eyed and penniless. We'd take him back to his sheep, and then for another year we'd see no more of Charlie. At last, one cold wintry day, the old fellow left his flock untended in the sheds, and a niece who had not heard from him in years inherited a legacy of several thousand dollars, all saved from his wages.

Facts like that stick in your mind. I remember, too, when the influenza epidemic of 1918 hit our valley and the interurban car served as an ambulance transporting many people, young and old, to the emergency hospital. Some never came back.

One day we took two brakeman off a freight train at Hot Springs. They had fallen sick on the job and made their last run with us. Later, on two successive occasions, we stopped at a farm and carried a whole family of five to the hospital. None of them returned to the farm. I was fortunate. I never caught it

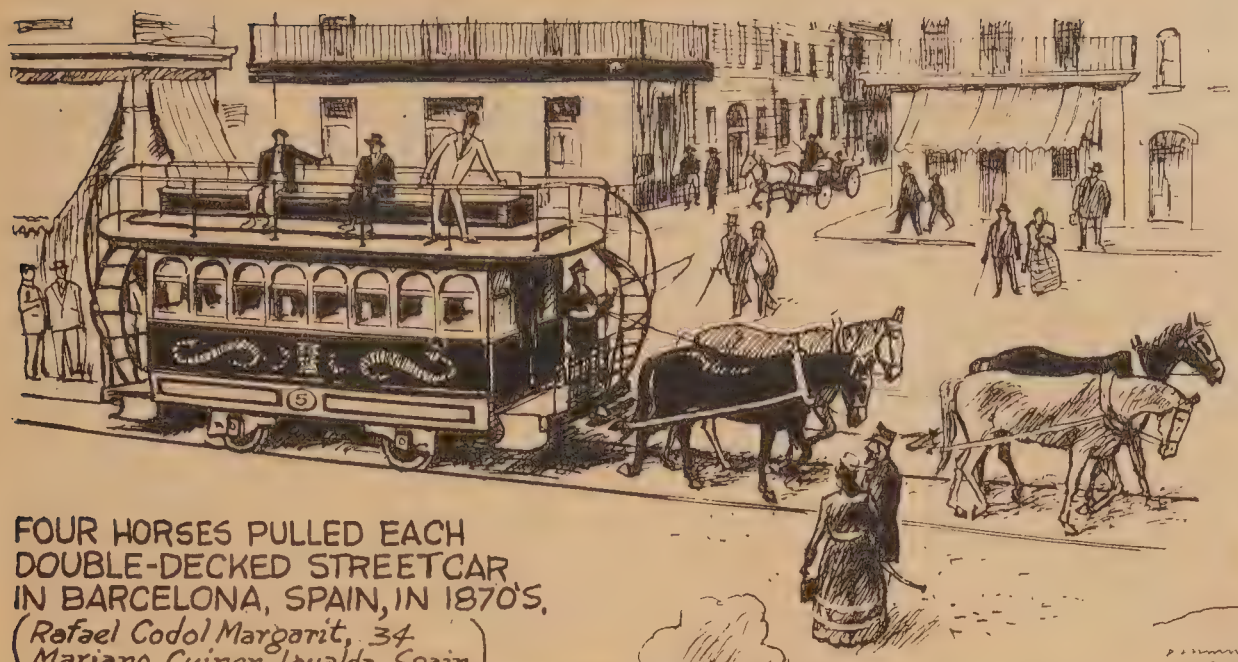
On December 31st that year the Gallatin Valley Railway company was dissolved, its 74-mile line becoming a regular branch of the Milwaukee. And that, with the words *freight only*, it remains today. But the interurban car kept running twelve years longer, with me at the controls working directly for the Milwaukee.

The freight motor also operated until 1930, its cab having been changed from box to steeple type. After the opening of the line to Three Forks the motor was used only for switching in and around Bozeman.

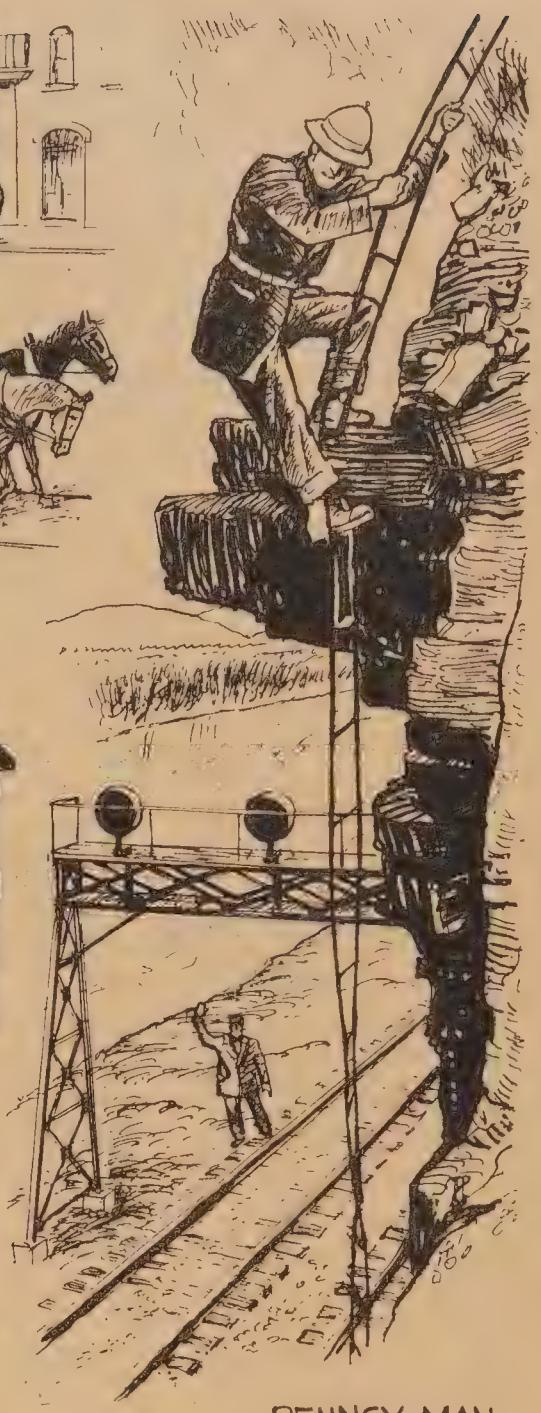
In 1930 the interurban died, trolley poles were taken down, and the sixteen miles of trolley wire were gathered in. I transferred to another job and went on working for the Milwaukee till I retired. ●

Along the Iron Pike

by Joe Easley

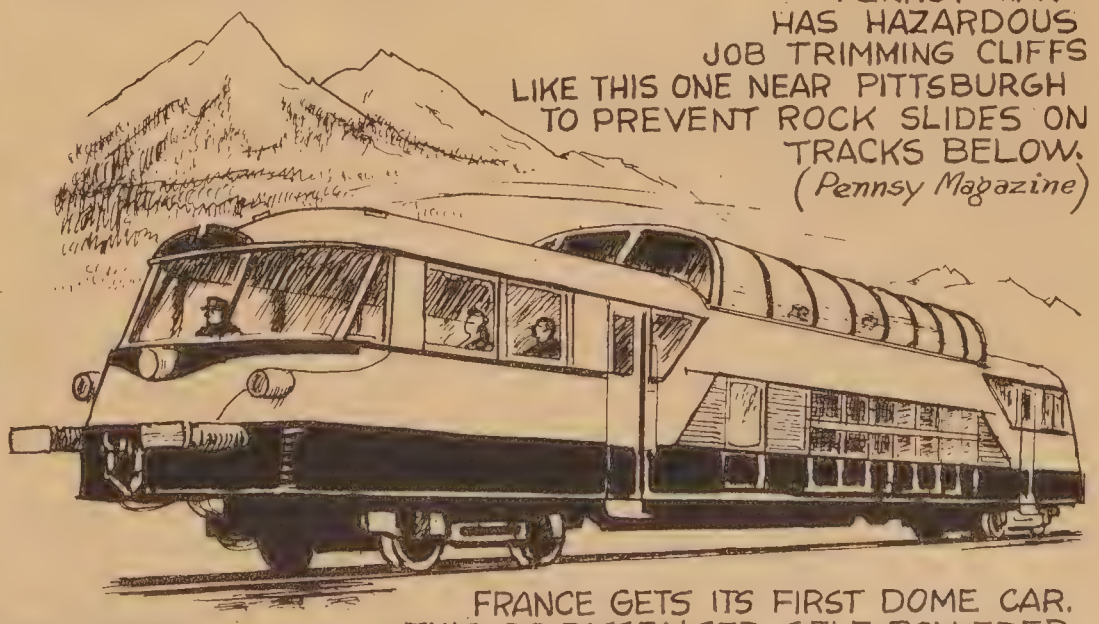


FOUR HORSES PULLED EACH DOUBLE-DECKED STREETCAR IN BARCELONA, SPAIN, IN 1870'S.
(Rafael Codol Margarit, 34 Mariano Cuiner, Igualda, Spain)



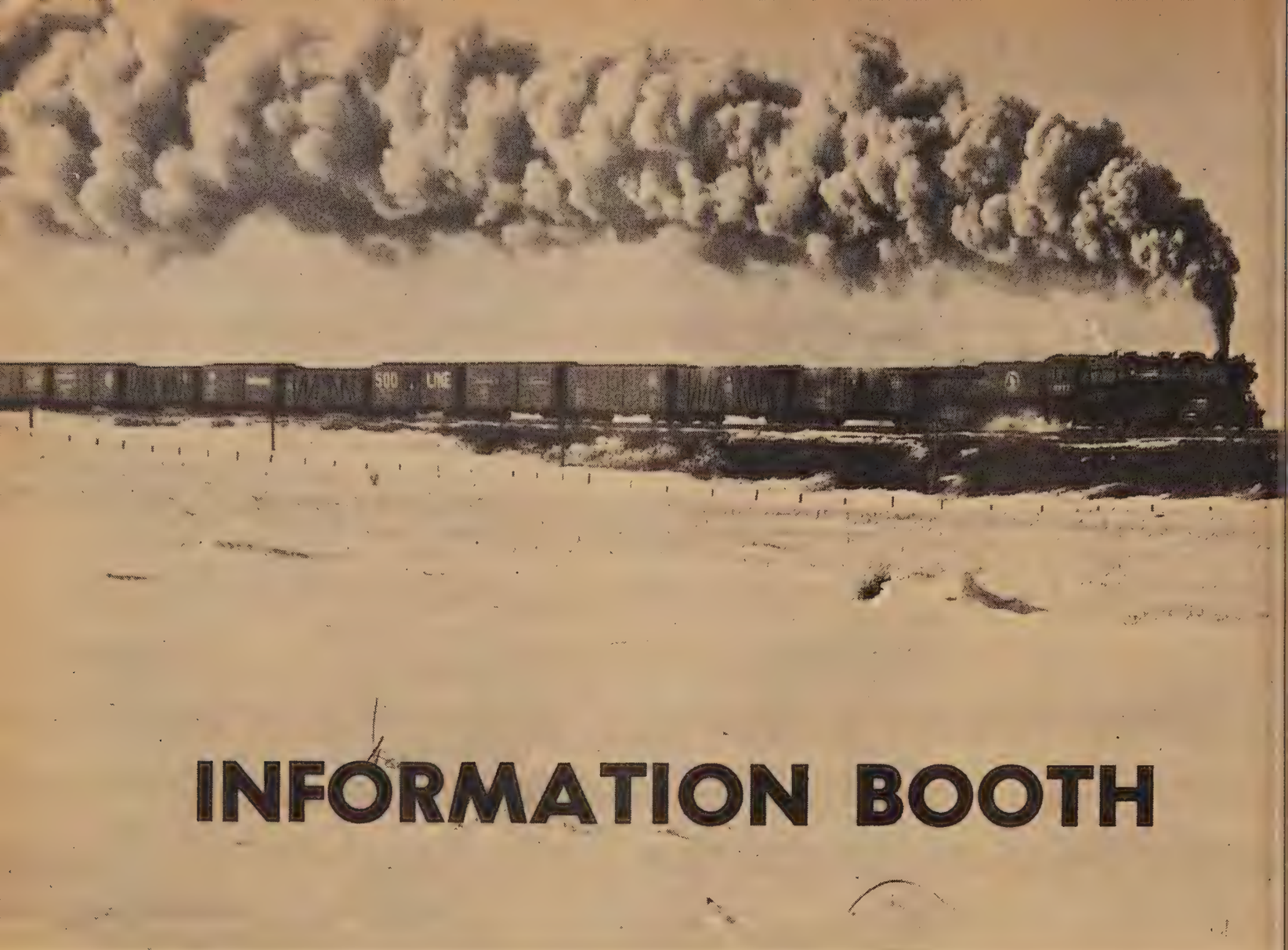
WHO CAN SUPPLY FACTS ABOUT THIS TRAIN, KNOWN AS "THE DUMMY," THAT RAN BETWEEN FORT ERIE AND ERIE BEACH, N.Y., IN 1890'S?
(Drawn from photo in Buffalo Historical Society collection)

PENNSY MAN HAS HAZARDOUS JOB TRIMMING CLIFFS LIKE THIS ONE NEAR PITTSBURGH TO PREVENT ROCK SLIDES ON TRACKS BELOW.
(Pennsy Magazine)



NUCLEAR INSTRUMENT DEVELOPED BY NEW YORK CENTRAL USES GAMMA RAYS TO DETECT HIDDEN FLAWS IN RAILROAD CROSSTIES. IT CUTS TIE-REPLACEMENT COSTS.

FRANCE GETS ITS FIRST DOME CAR. THIS 88-PASSENGER SELF-POWERED RAILCAR IS ONE OF 10 PUT INTO SERVICE FOR TOURISTS ON THE RIVIERA AND IN THE ALPS.



INFORMATION BOOTH

Steam memories: Great Northern No. 3377, a 2-8-2, wheels eastbound grain extra from Lothair, Minn., to Minneapolis.

David Plowden, 1239 Madison Ave., New York City

1 *I found a reference in a Boston & Maine timecard of* 1928 *to a loco class I had not known, M2-A, road numbers* 800 *and* 801. *From the high tonnage rating I assume they were Mallets. Tell me about them.*

They were 0-8-8-0 compound Mallets, a type rare in New England, built for B&M by Alco in Oct. '22. Both were used in heavy freight service between Mechanicsville, N. Y., North Adams, Mass., and Rotterdam Jct, N. Y., until 1929, when they were sold to Utah Copper Company.

Diameter of driving wheels 51″; diameter of cylinders 26″ h.p., 40″ l.p., stroke 28″; boiler pressure 22 lbs.; weight in driving order, engine 465,000 pounds, tender 189,500 pounds; tractive effort, simple 120,600 lbs., compound 100,500.

2 *(a) Which road uses Cajon Pass in California? (b) Is it a good place for a fan to take action shots?*

(a) The Santa Fe. (b) Yes, diesel action shots.

3 *Have increases in train speeds made more ties necessary?*

Yes. The average number of ties per mile on our earliest mainline railroads was 2,640. It is now 3,063 and in time may reach 3,100.

While North America's total track mileage has shrunk since 1930, the volume of wood needed for ties keeps rising. Says Bob White, Grand Trunk Western section boss: "The average tie 'grew' in the last 35 years, the standard 8-footer becoming 9 feet long and an inch or two wider and thicker."

4 *How far from a traffic control center can CTC be effective?*

That has never been determined. Union Switch & Signal is installing such a center at Houston to control Texas & New Orleans (SP) track as far as Belen, Texas, 815 miles away, more than twice the distance of any previous installation.

5 *Do you know of any railroad on which I can get a free ride?*

No, unless you are regularly employed by the organization which operates it or unless you are a journalist and some road agrees to pay your fare so you can write an article about it for publication.

But if you had been in El Paso, Texas, last May 16 you could have enjoyed a Southern Pacific round trip free between that city and Fort Bliss, 45 minutes each way, to celebrate Armed Forces Day, reports Leo Bradstreet. SP provided train and crew; Army furnished a sergeant in each car to give information to passengers. This service may be repeated next year.

6 *Did entertainer Ed Sullivan ever work for a railroad?*

Yes, for a short time in 1918 the

ASK BARBARA: **Railroad questions are answered here every issue by our research expert—as many as space permits. Top priority is given to subjects that seem to be of wide general interest. Address Miss Barbara Kreimer, *Railroad Magazine*, 205 E. 42nd Street, New York 17, N. Y. No replies will be sent by mail.**

Illinois Central employed him as a freight trucker at 30 cents an hour, somewhat less than his present income from TV.

7 *How many miles of the Reading are electrified for passenger trains?*

Nearly 200, out of the Philadelphia terminal to Hatboro, Lansdale, Norristown, Chestnut Hill, and Doylestown, Pa., and Trenton, N. J.

8 *Do you know of a sleeper car that regularly uses a different route going and coming?*

Cleveland - White Sulphur Springs sleepers run south on Nickel Plate via Fostoria but return on Big Four (NYC) via Columbus.

9 *Why did silk specials make faster-than-passenger-train speed?*

Because raw silk cocoons, imported from the Orient to West Coast ports, deteriorated rapidly and had to be kept dry, because they were sold in New York markets at fluctuating prices, because of possible robbery (15 carloads of silk being valued at nearly $6 million), and because 6 percent interest on such a shipment, not to mention high insurance rates, ran into big figures.

Silk trains had specially-designed cars lined with varnished wood, sheathed in paper, airtight, and sealed, so that neither thieves nor moisture could reach inside, and the trains were guarded well. Each car usually held 470 bales of cocoons, with a caboose behind.

These hotshots had priority over everything else on the rails. Even transcontinental fliers took to sidings to let the silk go by. On one occasion a Canadian Pacific special train carrying the Prince of Wales, later King George VI, went "into the hole" while rich perishable cocoons burned up the rails. The fastest CPR silk run was made from Vancouver, B.C., to New York in May, 1931, in three days and 13 hours.

A Great Northern hotshot that left Seattle on Aug. 14, 1924, set the all-time silk-train speed record by pulling into St. Paul in 38 hours and 50 minutes.

From some time in 1922 until the last one November 25, 1933, the "Big G" operated nearly 500 high-speed silk specials. Such runs were finally discontinued because the introduction of rayon, nylon, and other substitutes cut the demand for silk. Shipments of cocoons arriving today at West Coast ports are not of trainload proportions.

10 *How many U.S. railroads have passenger-train telephone service?*

Only one, the Pennsylvania, on its *Broadway Limited* running between New York and Chicago and *The Congressional* between New York and Washington. These phones operate like service from a booth in a corner drugstore, except that the message is transmitted by radio from the railroad car to a land phone base within about 50 miles of the moving train.

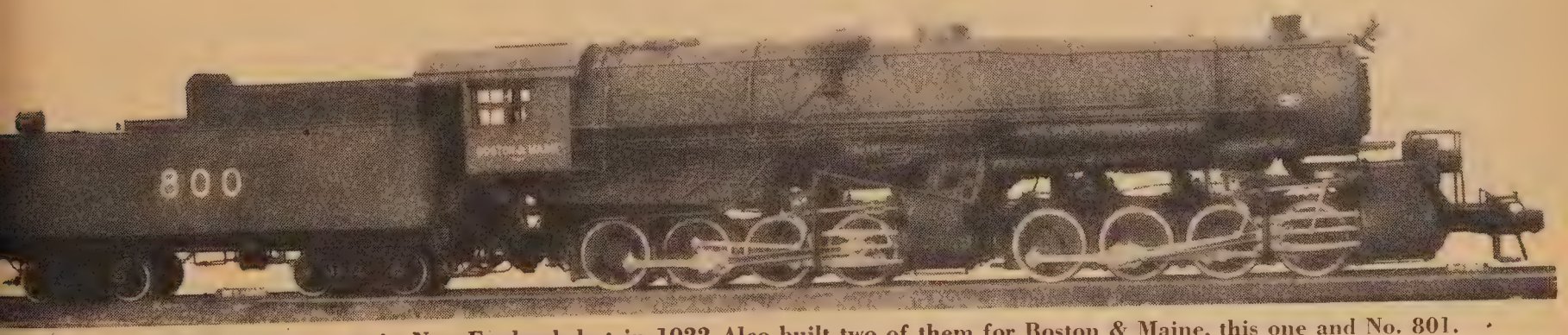
The Rock Island, Illinois Central, and New Haven used to have such service but quit because few riders patronized it. Some roads, including the Milwaukee, have radio-phone communication between train crews and dispatchers, etc.

11 *I hear there is more trackage underground in Pennsylvania coal mines than on all other railroads in the state. Is that so?*

We asked the Department of Mines and Mineral Industries, Harrisburg, Pa. Their reply is a fine sample of official ignorance: "There are a great number of miles of track in the coal mines of this state, but we have no records on the subject."

12 *How did (a) Kicking Horse Canyon on the Canadian Pacific and (b) Dead Horse Gulch on the White Pass & Yukon get their names?*

(a) In 1858 Dr. James Hector, a British Government explorer, was kick-



Compound Mallets were rare in New England, but in 1922 Alco built two of them for Boston & Maine, this one and No. 801.

ed by his steed while seeking a pass through the Rockies.

(b) In 1897 railroad surveyors are said to have counted the remains of 5,000 dead horses which fell down a steep slope during the Yukon gold rush.

13 *I am a B&O switchman planning to retire soon. How can I figure the annuity I will get?*

A series of pamphlets giving such details is issued free to railroaders and their families. Write U.S. Railroad Retirement Board, Information Service, 844 N. Rush St., Chicago, Ill., or Board office nearest you.

14 *How many shortline railroads are there in the District of Columbia?*

It depends upon what you mean by *shortline*. There are nine, according to Herman Diers, Washington, D.C., if you count the D.C. streetcar system, which he describes as the world's only electric third-rail conduit line, and the short electric railroad connecting the new Senate Office Building with the Capitol.

The others are: (1) The District's Health, Education & Welfare Dept. line, ¾ mile, steam loco, (2 and 3) Potomac Electric Power Co., one mile, and its Buzzards Point plant, each with a fireless steam loco, (4) East Washington line, diesel, (5) Washington Terminal, diesel, (6) Naval Gun Factory, diesel, and (7) United Clay & Brick narrow-gage industrial line.

15 *Was the A&P food-store chain connected with the old Atlantic & Pacific Railway?*

No, but The Great Atlantic & Pacific Tea Company (its full name) adopted that name to cash in on publicity that attended the linking of the coasts by rail in 1869.

16 *What were Reading type engines?*

Nos. 110 through 113, Class C-1-a, built at the Philadephia & Reading shops in 1915 as 4-4-4's but rebuilt in 1916 as 4-4-2's, Class P-7-5a, and renumbered 350 through 353.

Original specifications: 80″ drivers, 23½x26′ cylinders, boiler pressure 240 lbs., weight on drivers 133,000 lbs., total weight 230,800 lbs.; tractive effort 36,604 lbs.

Rebuilt: same cylinders and drivers, b.p. 215 lbs., weight on drivers 129, 210 lbs., total weight 231,925 lbs., tractive effort 32,800 lbs.

17 *A brief history, please, of the East Pennsylvania Railroad.*

Chartered in 1856 as the Reading & Lehigh to build between Reading and Allentown, Pa., 35 miles, it was renamed the East Pennsylvania and completed April 20, 1859. Ten years later it was taken over by the Philadephia & Reading and has been a branch of that system ever since.

18 *What is the difference between forms 19 and 31 train orders?*

The "31" order has to be signed for; the "19" doesn't.

Before delivering a "31" the operator must set his train-order semaphore, bringing the train to a full stop, and get the conductor's signature. Prior to signing, the skipper must read the order aloud to the operator, then to his engineer. Conductor and engineer must each be given a copy. Both men must tell the operator whether or not they understand its meaning. If not, the operator must ask the dispatcher for clarification.

For a "19," the train slows down (but does not stop) so that the operator may deliver the order, together with a clearance card, by means of a train-order hoop.

German Federal Railroad is now operating double-deck piggyback with special small-wheeled freight cars, each car having three axles, to assist in the exportation of little automobiles, mostly to America. A train of 26 such cars can be loaded with 260 Volkswagen and made ready for departure in less than one hour.

German Federal RR. Agency, 11 W. 42nd St., New York City

Running Extra

When you answer a question requested in *Information Booth* or *Running Extra*, be sure to mention the item number and date of issue.

"HIGHER even than N&W's Abingdon branch (Aug., page 41) is the Western Maryland's Elkins-Webster Springs branch, which climbs 4017 feet above sea level in crossing Cheat Mt. about a mile from Spruce, W. Va.," writes Bill McNeel, 1316 Virginia St., Charleston, W. Va.

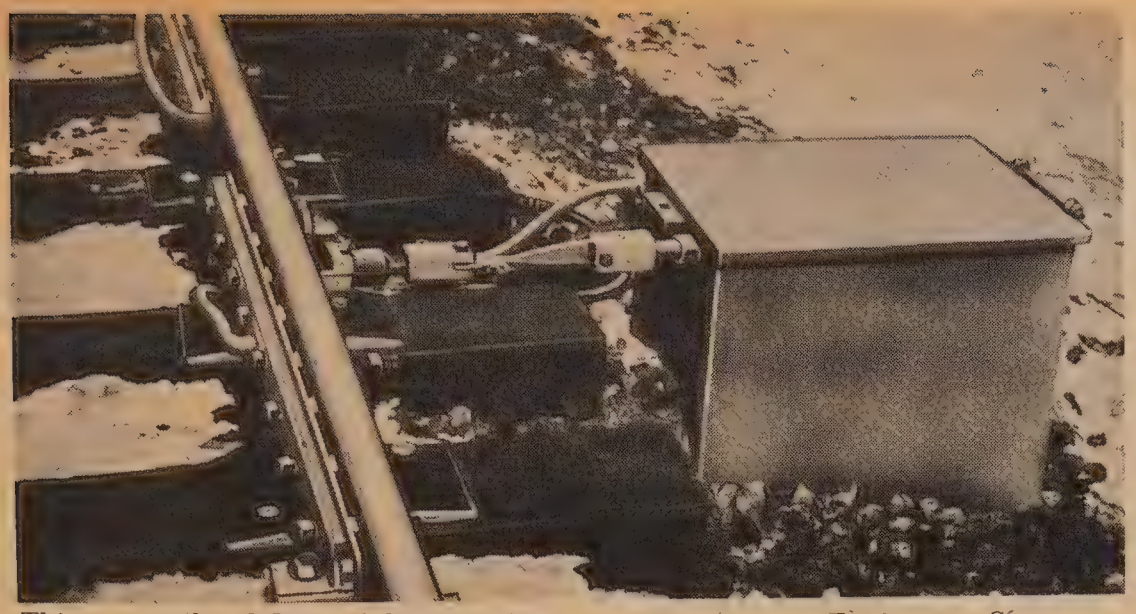
"The railroad with the highest elevation east of the Mississippi is Mower Lumber Co. line out of Cass, W. Va., which tops 4300 feet only a few miles from WM's highest point. It owns 3 Shays. Railfans riding its trains enjoy a thrilling trip through rugged mountains."

"I SEEK info. on a Columbus & Lake Erie RR. bond, issued 1850, and the road itself," writes E.T.M. Carr, 407 Broadway, Long Branch, N. J.

FACTS on latter-day operations of D&RGW's Santa Fe branch are wanted by Jerry Day, Box 372, Bastrop, La.

HISTORY of Warrior River Terminal in Alabama is sought by J. Graves, 12031 75th S., Seattle, Wash.

NARROW-GAGE. Additions to the list of North American roads (June issue) are compiled by Stanley T. Borden, 754 Stanyan Ave., San Francisco, Calif., with help from readers:



This new rail-and-flange lubricator, known as Maintenance Equipment Company type MC, is said to increase the efficiency of lubrication over previous models.
Maintenance Equipment Co., Ry. Exchange Bldg., Chicago, Ill.

Chicago Tunnel, Chicago, Ill., 47 miles, 2-foot gage (petitioned ICC for abandonment)
California Salt, Saltus, Calif., 4 m., 3-ft.
Pacific Coast Borax, Ryan, Calif., 6 m., 2-ft.
Western Salt, San Diego, Calif., less than one mile, 2-ft.
U. S. Marine Corps, Camp Pendleton, Calif., less than one mile, 3-ft.
Dominion Tar & Chemical and its subsidiary, Canadian Creosoting, have lines at New Westminster, B. C.; Edmonton, Alta.; Sudbury, Ont., and Truro, N. S.
Kirkfield (Ont.) Crushed Stone, 1 m., 3-ft.
Canadian Gypsum, Windsor, N. S., 5 m., 3½-ft.
Bowater's Newfoundland Pulp & Paper Mills, Cornerbrook, Nfd., 3½-ft., plant switching line
Buchans Mining, Millertown Jct. to mine, Newfoundland, 36½ m., 3½-ft.
Anglo Newfoundland Development, exploits dam, Red Indian Lake, Nfd., remnant of abandoned Millertown Ry., ⅛ m., 3½-ft.
Grand Falls Central Ry., owned by Anglo Nfd. Dev., paper mill to Botwood, Nfd., 22 m. 3⅛-ft.
U. S. Air Force, Harmon Field to White's Road Jct., Newfoundland, 8 m., 3⅛-ft.
Dominion Steel & Coal, Sydney, N. S., plant switching, line, 3-ft.
Huntsville & Lake of Bays Ry., South Portage, Ont., 1¼ m., 3½-ft., summertime only
Algoma Steel, Sault Ste Marie, Ont., 3½-ft.
International Nickel, Copper Cliff, Ont., 2½-ft.
Levert (La.) St. Johns Plantation, 4 m., 3-ft.
Dugas & LeBlanc Westfield Plantation, Paincourtville, La., 3 m., 2½-ft.
National Sugar & Refining, Reserve, La., 12 m., 3-ft.
Lula Plantation, Belle Rose, La., 4 m., 3-ft.
Slidell (La.) Brick & Tile, 1½ m., 3- and 3½-ft.
Anaconda Copper, Perth Amboy, N. J., 1¼ m., 3½-ft.
Dismal Swamp (Va., N. C.) RR., 15 m., 3½-ft.
Norfolk & Western Ry. tie-creosoting plant, Radford, Va., 1½ m., 3-ft.
Nacionales de Mexico: Mexico City to Puebla, 194 m.; Atencingo to Tlancualpan, 12 m.; Cuautla to Puenta de Ixtla, 50½ m.; Oriental to Tezuitlan, 55 m., all 3-ft.
Coatluila & Zacatecas RR., Saltillo to Concepcion del Oro Zacatecas, Mexico, 98 m., 3 ft.

THE VIRGINIAN'S 125-128, which develop 130,000 pounds of tractive effort, are the most powerful electric locos, according to Bert Pennypacker, 4307 Palmetto St., Philadelphia, Pa., commenting on Item 5, Aug. issue. Bert says Great Northern's 5018 and 5019 develop only 117,000 pounds t.e.

"As your listing of most powerful locos is on a single-unit basis," he continues, "it should exclude Pennsy BP-60's, since the figure 204,500 pounds is for two units. Of course, Pennsy uses its BP-60's permanently coupled in two units while Seaboard runs its similar units separately. On a one-unit basis, the Seaboard's electric tops the Pennsy's by a slight margin.

"In quoting the starting t.e. of electric or diesel-electric power I assume you evaluate the data simply on normal computation of 25 percent adhesion—one-fourth of weight on drivers. Under oprating conditions it is normal for electric locos to achieve 30 percent adhesion, sometimes over 35. Ordinarily, these figures are not used in specification lists, even though they could upset a few records. For example, the Milwaukee electrics E10-E19, Class EP-3, are rated at a normal starting t.e. of 49,000 pounds, yet in tests they produced up to 153,000!

"As for N&W's 2-8-8-2's, each succeeding Y class had progressively higher t.e. The last Y-6b's, built in 1952, develop 170,000 pounds t.e., while operating simple. But not even this is the highest tractive effort for steam. The Virginian's 2-10-10-2's, numbered 800-809, were rated 176,000 operating simple."

INFORMATION is wanted by John Hotchkiss, 89 Sagamore Drive, Rochester, N. Y., on a big kerosene lantern made by Dressel Railway Lamp Works, New York. And W.B. Frackleton, Rte. 4, Oconomowoc, Wisc., wants to know about the MLS&WRR, whose initials adorn an old lantern he owns.

WHO can tell us whether or not Morse wire is still being used to dispatch trains and, if so, where?

WANTED by Harold Kelly, 158 Lee Ave., Hicksville, N. Y., data on the LIRR's first four locos (*Ariel, Post Boy, Hicksville, Taglione*)—specifications, color, sketches, history. Also color and design of LIRR coaches used in 1837-'45.

PHOTO in Aug., page 36, right, shows a combined loco and car body, forerunner of present-day RDC's (rail-diesel cars), says Walter A. Lucas, former managing editor of *Locomotive Cyclopedia*. Named *Shakopee*, she ran on Minnesota Valley RR. (now part of CStPM&O). Three were built in 1865 by Wm. Romans, Piqua, O. The other two were named *Economy* and *Express*.

Pic at left, same page, evokes a note from R.A. Lambert, 319 W. 38th St., Los Angeles, Calif.: "In about 1900, when I was a boy living at Shamokin, Pa., the Reading operated several of these inspection-type engines, delivering payrolls to coal mines in Pennsylvania."

ROSTER of Williams Valley locos is wanted by Warren Stowman, 2011 W. Godfrey Ave., Philadelphia, Pa. This line (now part of the Reading) ran between Brookside and Lykens, Pa.

"WHAT happened to the fine models of locos and rolling stock built by Guy Vaughan, College Point, N. Y., when he died in 1946?" asks F. A. Maxwell, 3-772 Pacific Highway, Chatswood, Sydney, New South Wales, Australia, who has a copy of Aug.'48 *Railroad Magazine* containing an article about Mr. Vaughan.

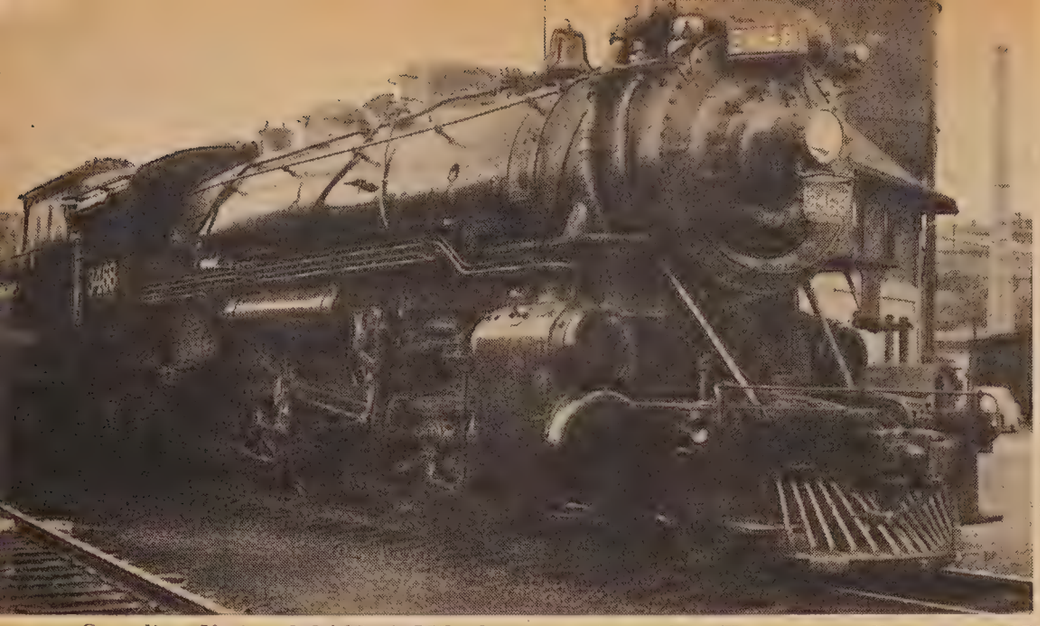
DON TAYLOR, Mark, Ill., wants brief history of Milwaukee, Rockford & Southern, a tool car from which is located in his town and converted to living quarters.

HISTORY of Huntingdon & Broad Top Mt. RR., discussed in April and Aug., is well known to G. W. Crum, 4821-L Rose Terrace, Fort Knox Ky., whose father was a train dispatcher on the road 43 years. He'll answer questions. Also familiar with H&BTM is James Lilly, 1025 Pike St., Huntingdon, Pa.

WHO will send a copy of "The Railroad Man's Prayer" to an old retired Pennsy man, Arthur L. Payne, RD 1, Collegeville, Pa.?

ANSWERING a request for history of Utah & Northern, C. W. Carling and T. J. Gascoyne say it had standard and 3-foot gages and extended from Ogden, Utah, to Silver Bow Jct., Mont., 408 miles, and from there 44 miles to the NP at Garrison, Mont., with a 9.42-mile branch from Silver Bow Jct. to Butte, Mont., and a 4-mile branch to Anaconda mines.

Line was organized in 1898 as successor to the 80-mile Utah Northern. In '88 it had 20 locos and 1639 pieces of rolling stock, including a paycar. Later it became part of the Oregon Short Line, still later a unit of the Union Pacific system.



Gene Gentsch, P.O. Box 323, Rahway, N. J.

Canadian National 3468, A Mikado type, pictured at Turcot roundhouse in 1957.

APACHE RY. data (requested Aug. '59) is supplied by Hugh Stephens and C. W. Carling. Incorporated Sept. 6, 1917, it runs through the Apache Reservation between McNary and Holbrook, Ariz., where it connects with the Santa Fe. Total, 72 miles plus 5.85 miles of sidings. Controlled by Cady Lumber Corp.

THERE is no rail periodical for the blind (Aug. issue) but parts of two Illinois Central histories, *Main Line to Mid-America* and *Trails to Rails*, are narrated on slow-speed disks by Recording for the Blind and may be borrowed free from the Library of Congress, "talking books" service, Washington, D. C., reports George Waugh, Jr., editor, *Best R.R. Data*, P.O. Box 247, Gambier, Ohio.

"WHO was Gen. Israel Hunt?" asks E. W. Hodgkins, 14 Olcott St., Manchester, Conn. "I have railroad passes issued to him, 1864-'74."

COMMENTING on Bois d'Arc & Southern (Aug. issue), C. W. Carling, 244 N. Main St., Wharton, N. J., found details in Reed's *History of Texas Railroads*. It's a gravel-hauling road, chartered July 9, 1934, connecting with the Texas & New Orleans, from which it leases rolling stock.

HUGH STEPHENS answers requests for brief histories of the Maryland & Pennsylvania and Sterling Mt. Ry. The "Ma & Pa" was organized in 1901 as a consolidation of the Baltimore & Lehigh and the York Southern. Originally narrow-gage, with sharp curves and wooden trestles, it ran between Baltimore, Md., and York, Pa., plus a branch to Dallastown, Pa.; total, 80.69 miles. Financial reverses led to abandonment of passenger service and some trackage. It no longer runs to Baltimore.

Sterling Mt. Ry., owned by Sterling Iron & Ry. Co., ran between Sterlington, N. Y., connecting with the Erie, and Lakeville, N. Y. Hauled mostly iron ore. Folded up apparently in the 1920's. Its steam loco rusted in the weeds until cut up for scrap in World War II.

J. L. WATSON (Aug., page 39), veteran collector of railroadiana, is dead, reports Arthur C. Davis

EMORY RIVER RR. was abandoned in 1958, due to closing of coal mines in area, writes Stanley Crews, Box 7074, Jacksonville, Fla., commenting on Item 10, August.

"TWO years ago I photographed an old brightly-colored 0-4-0, No. 117, the *Durango*, displayed on Highway 11 near Limeridge, Pa., west of Berwick," says Alfred Rose, 627 Tuolumne St., Vallejo, Calif. "Is she still there? Who knows her history?"

WANTED by Fred Nienow, 727 Sherman Ave., Oconomowoc, Wisc.: data on locos and cars of the 16-mile Chicago & Tomah (now C&NW) and specifications of its Baldwin-built 4-4-0 and 4-6-0 and Alco 2-6-0's.

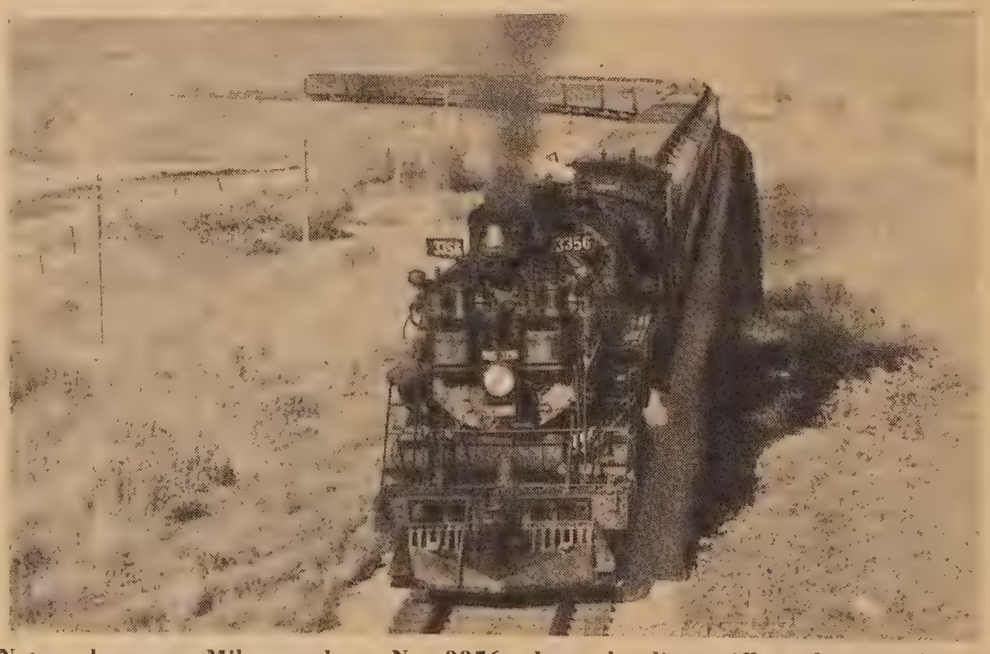
ANYONE having data, pix, catalogs, or experience with Vulcan duplex locos please contact Edwin Tefs, Jr., 1711 Baird Ave., Portsmouth, Ohio.

"LISTING of shortest railroad lines in U.S. and Canada (June, Item 25) omits the South Easton & Phillipsburg of Pennsylvania, 850 feet long, and the SE&P of New Jersey, 460 feet," writes Clinton T. Andrews, 1502 Lehigh St., Easton, Pa. "These two roads, used every day, constitute the Lehigh & Hudson River's bridge connection over the Delaware River between Phillipsburgh, N.J., and Easton, Pa. The bridge itself is 1310 feet long and has a rise of 22 feet. Until a few years ago SE&P Jct. was listed in the Pennsy's employe's timetable, New York Division."

Stanley Crews tells us that most of the roads we listed under (a) no longer operate *rail* passenger service. Charles Scott says the Boston & Maine stopped operating RPO cars last April 26, and the Claremont & Concord cut 'em out about two years ago.

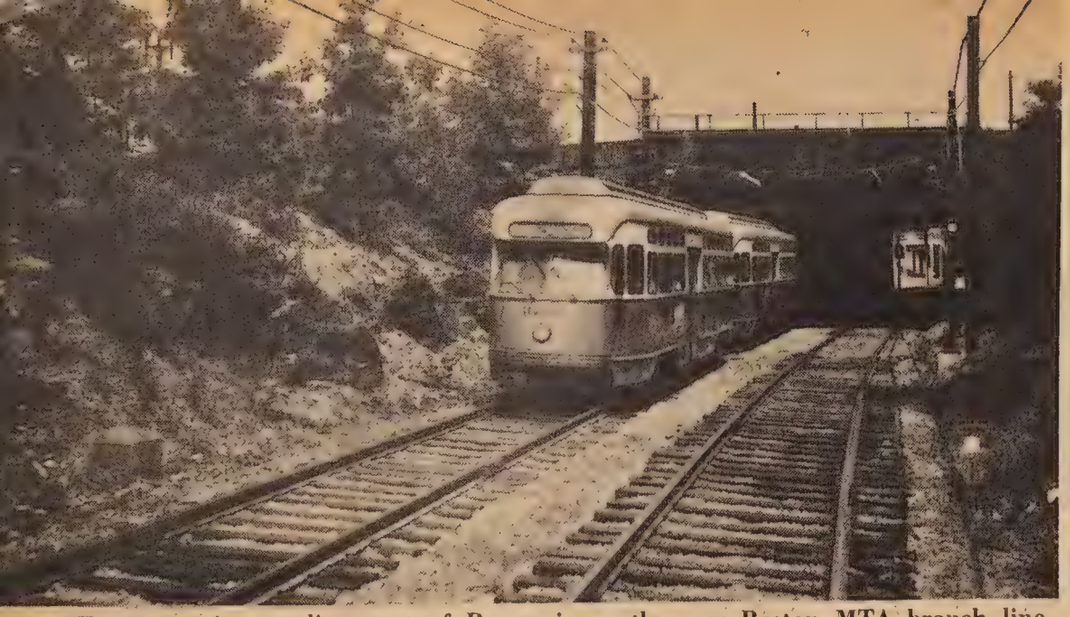
WHAT is the history of the railroad tracks underneath Salt-Air Beach in the Great Salt Lake, at Salt Lake City, Utah? Any old salt who knows this salty story please share it with Hubert Bussenitz, Jr., 2160 N. Major Ave., Chicago, Ill. ●

Rail Photo Service, Boston, Mass.



Not so long ago Mikes such as No. 3356, shown battling stiff grade over Great Divide near Rising Wolf, Montana, wheeled Great Northern *Empire Builder*.

Top-quality railroad photography does not necessarily have to show a train or a locomotive. Consider, for example, this impressive shot of a laborer walking on the Long Island Rail Road track near Westbury, N. Y., after a light, powdery snowfall.



Two-car train speeding west of Reservoir on the new Boston MTA branch line.
Photos by Steve Maguire, 1411 River Rd., Belmar, N. J.

Nos. 3312 and 3285 pass at entrance to tunnel ramp near the Kenmore station.

Car 3311 stops at Brookline Village. Note that the track is well ballasted.

Steve Maguire's TRANSIT TOPICS

OPENING of the new ten-mile Highland branch of the Metropolitan Transit Authority of Boston to PCC car operation is good news. Not since the North Shore Line's Skokie Valley route was laid with track more than 30 years ago has a new traction line of such substantial mileage been built. The MTA line, on the right-of-way of the Boston & Albany's abandoned Newton Highlands branch, was completed and placed in service July 4, less than a year after ground-breaking ceremonies July 10, 1958, which is quite a record.

Steve Maguire

To equip the old roadbed for streetcar use, overhead poles and wires had to be installed over the entire distance. A subway and inclined ramp to the surface, 1150 feet long, connects the new line with Boylston Street subway at Beacon Street. Also built were a loop and car yard at Reservoir terminal, new shelter stations along the route, driveways, parking lots, and a new power substation, automatically controlled.

It all began June 20, 1957, when the Legislature gave MTA permission to build the line. By Oct. 1 the MTA advisory board had approved the project, which then awaited only B&A abandonment of passenger service on May 31, 1958. MTA acquired title to the property and engaged Perini Corp., Framingham, Mass., to build at a cost not to exceed $6,994,339.25.

The route out of Park Street station, Boston, is 11.69 miles long, including 9.4 miles over the old B&A roadbed. It represents the furthest distance from the MTA system's center of any of the Authority's rapid-transit lines. The outer terminal is Riverside. Running time is 34 minutes, with an average speed, including stops, of slightly over 20 miles an hour.

Traffic is exceeding expectations. Five two-car trains were added to the

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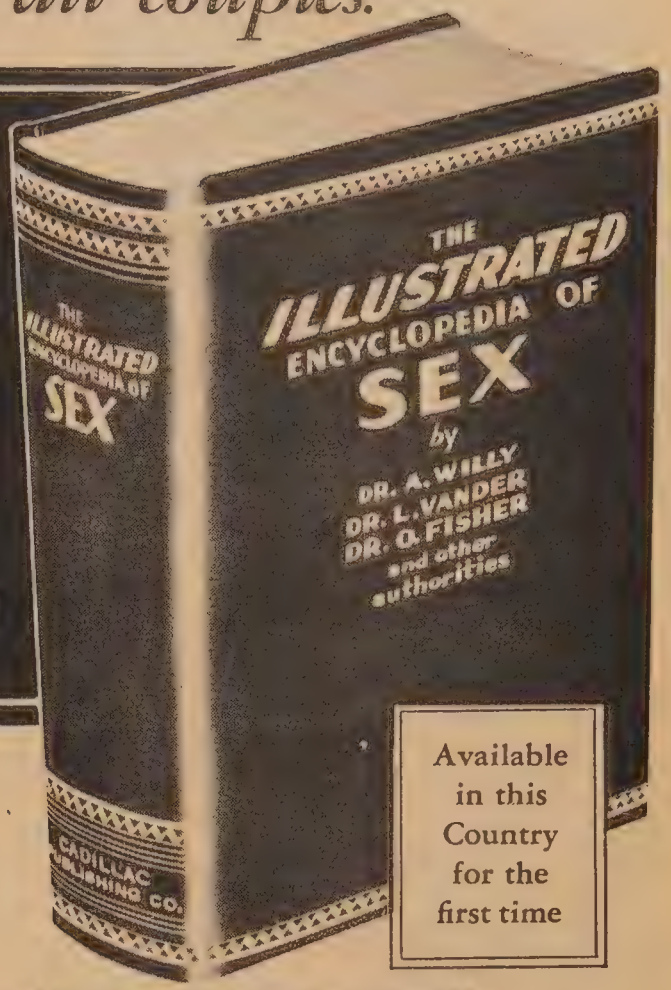

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schedules after the first weekday rush, which produced 1000 passengers more than had been anticipated. Even in its palmiest days, B&A never had more than 5000 daily commuters; at the time service ceased, only 1000. Now, reopened for rapid transit, with adequate parking lots for drivers, an average of 20,000 daily are riding the cars. So impressed is Governor Furcolo that he is urging the State Legislature to set up a transit authority for Greater Boston, a much wider area than MTA now encompasses.

MTA is buying the last 17 remaining ex-Dallas PCC cars. They already had 8 but traffic is so heavy that they need others.

"I hear all kinds of glowing comments on the new line," writes Roger Borrup, Warehouse Point, Conn. "The first Monday of normal business showed 22,000 passengers. One MTA official had said the line would be profitable as soon as the number could be built up to 10,000 a day! With the new school term bringing additional passengers, MTA may need more cars. The situation could be a breakthrough that will help rapid transit in other cities."

THE BOSTON STORY contrasts sharply with events elsewhere. For example, in the San Francisco area the only rapid-transit route across the Bay was scrapped last year for a motor highway. Today the planners are thinking of building an underwater rail tunnel at terrific cost. Los Angeles, in dire need of rapid transit, gets many publicity releases on proposed monorail lines, with not a serious scheme in sight, while the best possible routes for rapid transit are being "bussed." Even in the vast New York-New Jersey metropolitan area each transit plan is met head-on by selfish special-interest groups lobbying against it.

ON THE LIGHTER SIDE, a rock-and-roll song entitled *MTA*, recorded by the Kingston Trio on a Capital label, has become a big hit. It tells how "Charlie," with only a dime in his pocket, boarded a Boston subway train, unaware that the fare had gone up to 15 cents, the additional nickel to be paid on leaving the underground. To the tune of an ancient folksong, *The Ship That Never Returned* (later used also for *Wreck of the Old 97*), the Capitol record laments that Charlie never returned, his fate is unlearned,

Governor Furcolo of Massachusetts opens new Boston MTA branch line.
N. Clark, 29 Richardson St., Newton, Mass.

and "He may ride forever 'neath the streets of Boston."

The *MTA* ballad was recorded a few years ago, when the fare had just risen to 15 cents (today it's 20), but it didn't catch on till recently. Since jukeboxes and radios across the country have popularized it, MTA has received many nickels by mail to pay Charlie's exit fare. They also get sandwiches and other edibles addressed to Charlie, for the song says that Charlie's wife hands a sandwich to him through an open window each day at Scollay Square station "as the train goes roaring through."

"LAST Aug. 15 was the 125th anniversary of Electric Railroaders' Assoc.," writes E. J. Quinby, first secretary, now honorary president. "In 1934 we put a small adv. in *Railroad Magazine*, hoping to find a few fans. The avalanche of replies convinced us that more persons than we had dreamed of were interested in electric railways. Today we have over 2000 members, a monthly magazine, *ERA Headlights*, and national headquarters at 145 Greenwich Street, New York 6, New York.

FOLLOWING various plans for rapid-transit routes in and around Washington, D. C., using surface and subway lines, O. Roy Chalk, President of D. C. Transit Co., sets forth his own ideas for building 116 miles of monorail in the area, reaching north to Rockville and Friendship Airport, south to Alexandria, east to Andrews Air Base, and west to Chantilly. All but five miles of the proposed network would be overhead monorail; downtown cars would run below ground. Mr. Chalk says the competing subway-

The BIG FAT FLAME

We were stuck in the busy mid-Manhattan street. Behind us the traffic piled bumper to bumper, horns screeching indignantly. The Colonel leaned over to our cab driver. "What's wrong?" he asked.

by Harry Mayer
As told to him by
Colonel Fred P. Dollenberg

The cabbie pointed with his cigarette to the car in front, "Look."

We did. The car ahead of us—a shiny 1959 model—had stalled and the starter clattered endlessly with that empty metallic sound that you know in advance is not going to make the motor catch. Twisting the ignition key in helpless fury, the unfortunate motorist at the same time was exchanging uncomplimentary opinions with the drivers of the vehicles snarled behind him. At length he piled out of the car, wrenched at the hood, and looked fiercely at the inert engine. To no one in particular, but as though to vindicate himself to his tormenters, he shouted: "I just know it's those damned spark plugs. Only two thousand miles and already they're shot!"

Startled, I turned to my companion. "Colonel," I demanded, "is this a plant?" He stared back at me, then he got it and he began to laugh. So did I, in a moment, and there we were in this taxicab, stalled between skyscrapers and going no place, roaring as though we'd never stop.

Spark plugs! That was the joke. The Colonel and I were on our way to his downtown office where I was scheduled to interview him for a magazine story. The subject—spark plugs.

You see, Col. Fred Dollenberg is the inventor and manufacturer of a device which is designed to allow automobiles to run **without** spark plugs!

Later, sitting in his top floor office, with the drapes parted to reveal the exciting lower Manhattan skyline, I got a more leisurely look at the Colonel. I wondered and asked about his smashed nose,—the war maybe?—and he smiled and said no, just an opposing tackle with a very hard head. Dollenberg was a star fullback at St. Joseph's in Philadelphia before he joined the Army Air Force as a pilot immediately after he got his degree as an engineer. After war was declared against Japan and Germany, he saw enough action to later receive the Inquirer Hero Award as Philadelphia's most decorated flyer, succeeding a similar award to Marine hero Al (Pride of the Marines) Schmid. He was one of the first to personally pilot Gen. Douglas MacArthur. Evidently there was considerable brilliance to this young fighter; he started the climb up to the brain brass, and some of the military manuals he was charged with preparing are still used by the Air Force. (Only part of this did I drag out of Dollenberg. Indeed it was only through reading a newspaper file that I learned of the Colonel's outstanding combat record!)

It was while Dollenberg was in command of a task force of seasoned P-40 pilots that a grim incident took place which set the then Capt. Dollenberg off on his restless search for perfection. A young ace, coming in safe and sound from a mission where he had gone through murderous enemy fire, never made it to his safe hut a few hundred yards away. He nosed a bit too low—no engine power to get the plane up quickly—and the trees that lay just short of the runway caught the plane and pilot and crashed both. Dollenberg was horrified at the accident and at the paralysis of fatalism that seemed to settle on the shoulders of officers and enlisted men alike in the face of a tragedy so senseless. . . . After all, it seemed to say, it is true, isn't it, that more planes are lost through engine failure and other non-combat accidents than are brought down by the Japs? You had to expect such things—and accept them . . . But Dollenberg couldn't accept them. Not when the cause of this type of accident could be ripped out of the engine.

"Plug failure?", I asked. He nodded, shortly. "This tragedy and others, too. Too many others. Did you know that spark plugs were invented more than 40 years ago for engines whose limit was 20 miles an hour? These very same spark plugs? And that in principle they haven't changed an iota since? Can you imagine a 2000 horsepower motor depending for ignition on a skinny little spark that had been intended to help Grandpa toot around the square on a Sunday afternoon? Well, that's what these boys had under their P-40 hoods." The accident had started him off on his search, I supposed, and again he nodded. It hadn't been an easy journey. Apathy, defeatism — a young enthusiasm will always encounter these. I've done many success interviews, and it's a rare success that has been a joy ride. Dollenberg spent long hours off duty working on the problem of the antiquated spark plug, but when the war ended he still hadn't cracked it. Returning to a young wife and family the Colonel organized a non-scheduled commercial airline and operated it for 3 million miles, even introducing gliders for the first time in commercial aviation.

If it hadn't been for some weight-throwing on the part of one of the larger airlines which had begun to smart under the irritating competition it was getting from the Dollenberg outfit, the young man would undoubtedly have succeeded in commercial aviation and this particular story wouldn't have been written. But as it was, Dollenberg was forced out of business on the sort of technicality that somehow seems always to crop out against the small business, not the big. He had to sell.

Well, there he was — with a little money left from the debacle, a family, and a living to make for them. He turned his attention once more to the anachronism of modern engines — the spark plug. Starting again from scratch, he reviewed the problem.

"It's really quite simple," said Col. Dollenberg. "An engine provides power for a vehicle because gasoline, sprayed into the cylinder, is ignited by a spark. When ignited the gasoline burns pushing the piston down into the cylinder. The more complete the burning of the gas the more force in the cylinder. The more force, the more power. Obviously, therefore, the larger the spark the more gas ignited and burned. What we were after was a much larger spark, **a big, fat flame!"**

"And the conventional spark plug can't provide it?"

"No, it cannot. Every mechanic knows that."

"And the kid in the plane?"

"The P-40? What killed him was insufficient fire—a spark too skinny to ignite sufficient gas to give the engine instant power to climb up and over those trees."

"Why can't the spark plug give a fat spark?" I persisted.

The colonel spoke simply. "Because of its basic design. Every spark plug has an **air gap**—.025 to .035 of an inch—and the spark is no larger than the gap. No larger did I say? Only when the plugs are brand new is the spark even as large! Carbon forming immediately as the plug is put into use begins fouling, then ruining, the tip. The thin wire electrodes begin to wear away. The danger—and enormous expense—of this obsolete mechanism lies in these factors."

The answer to the spark plug was an igniter which had no airgap—which contained no wire electrodes—whose tip would not foul—which would not blow out even at the highest compressions . . . **which would never need a replacement for the life of the engine.**

Colonel Dollenberg went to Washington.

The Navy didn't accept him with open arms. The principle — fine! Let's see it work. And Dollenberg made it work. After the most exhaustive tests, he knew he was in. His LS-702 proto- (Continued on next page)

"The spark plug was invented more than 40 years ago. For the last 20 years it has not been doing an adequate job. The U. S. Navy and Air Force knew this only too well. The Naval Bureau of Aeronautics cooperated with me by undertaking extensive, expensive testing to replace obsolete spark plugs with this new efficient type of fuel ignition. We were successful with the LS-702—the aircraft predecessor of the present Lectra Fuel Igniter for automobiles. Today this extraordinary invention is replacing spark plugs in tens of thousands of automobiles throughout the country. By 1961 every car made will carry fuel igniters not spark plugs" . . . Col. Fred P. Dollenberg, U. S. Air Force, from a speech at the Conrad Hilton Hotel, Chicago, January 8, 1958.

(Advertisement)

HOW MOTORISTS ARE SAVING $100 A YEAR

	SPARK PLUGS	LECTRA FUEL IGNITERS	SAVINGS
Cleaning, Gapping, Replacing	several times a year	never	$10 per year
Gas Consumption	600 gallons	465 gallons	$40 per year
Additional cost of premium gas	$50 a year	not a cent	$50 per year
		TOTAL SAVINGS	= $100 per year

type was approved for U. S. Navy high-compression engine use.

If that had been it, it still would have made a good story — the revolutionary change that a former fighter pilot had effected in military aircraft. But that wasn't all. Dollenberg turned to the field of automobiles.

For more than 40 years the old-fashioned spark plug had been the standard gas igniter for every car made. During that time engine power had soared from less than 20 horse to more than 300. Every year the puny spark plug with its skinny little flame became less able to do its job. The new high compression engines were now burning out spark plugs in a few thousand miles of driving. In 1958 Americans paid more than 500 million dollars merely to replace worn-out spark plugs. To provide what spark plugs could not do, the big oil companies began to produce super and than super-super gas — at super prices! Not only were car owners spending a huge sum for plugs each year — they were also spending a fortune in premium gas for the privilege of keeping spark plugs in their engines. And even at that they were not getting their money's worth, as the new cars they bought very soon became sluggish ones.

If ever there was a call for a modern, efficient ignition mechanism to go with the modern automobile, this was it. Dollenberg heard the call. He marketed the LECTRA FUEL IGNITER!

There were problems. Little ones like designing the aircraft igniter to the same size and shape as the conventional automobile spark plug it was to replace. And big ones such as getting a small voice heard in the towering wilderness of the Detroit automobile kingdom. Dollenberg was helped by the shrewdness of fleet operators whose business depended upon efficiency and economy. Taxicabs running triple-shift around the clock installed the Fuel Igniter and reported a 10-20% increased gas mileage per car! Truck owners followed suit—and then the motorist. In less than 12 months, sales of the Lectra Fuel Igniter zoomed into the million dollar stratosphere!

I asked Dollenberg about the Lectra advertising claim that had jolted motorists all over the country. "Colonel, you've made the guarantee that LECTRA FUEL IGNITER will save a car owner $100 a year or that you will take back the igniters and refund their money. How do you arrive at that one hundred dollars figure?"

"It's based on the average of 10,000 miles of driving in one year. First there will be a saving of from $10 to $12 a year in eliminating spark-plug cleaning, gapping, and adjusting at 5,000 miles, replacement at 10,000 miles."

"Does that mean that the Fuel Igniter will need no cleaning or replacing for a whole year?"

"It means that the Fuel Igniter will never have to be cleaned or replaced! I mean that we guarantee that it will outlast the life of any car! Not only that: we are also guaranteeing that the Fuel Igniter will squeeze up to 6 — maybe 8 — more miles out of every gallon of gas purchased the first year and every year —or we will replace them free until they do. That's a saving of $40 per year. And it will do this using regular gas — economy gas—not the super gas bought at such walloping prices. That means a saving of $50 each year. And the Igniters will do this every year of the car's life—they improve with age. They never wear out!"

As Dollenberg talked I drew up a chart. You can see it at the top of this page.

I said to Dollenberg, "Colonel, to a person like myself — a guy who drives a car well but knows next to nothing about its mechanism—who's always felt the car runs better after it's had a wash —how will I know right away I've really got something after I've switched from spark plugs to Fuel Igniters?"

The Colonel twinkled at me in sympathy. "I've always felt it a pity they don't teach mechanics to all school children. I think I know just how you feel. Anyway — very seriously — please listen to this: The first time you press the starter after you've installed the Igniters (very simple — by the way), you'll hear and feel an instant clean throb and an immediate even roar of the engine. I tell you, you'll be astonished. Even on the coldest morning you'll get a thrill, listening to your engine kicking over instantly and then settling quickly into a smooth purr. As for stalling in traffic, like that fellow did this afternoon, that won't happen to you. Stalling is almost always traceable to a faulty spark—and the Igniter will not fault. Climbing and passing? Even a big 325 horsepower car can and does falter on a hill or when it tries to pass if suddenly the spark plugs aren't burning sufficient gas. That won't happen to you. Instead you'll climb and pass more swiftly than you've ever known because you'll be burning gas, not wasting it. You've heard about the simple exhaust test? Try it. First, with the spark plugs in place, let the engine idle and stuff a ball of white absorbent cotton into the mouth of the exhaust. It will come out soaking with unused gasoline. Then try it with Igniters replacing the plugs. The cotton ball will be almost dry. The gas burned instead of escaping through the exhaust. Or here's something else. Again with spark plugs in the car go into gear — or in drive if you have an automatic transmission. Don't touch the accelerator. Now note how much the car moves forward — if at all. Then unscrew the plugs and put back the Igniters. If you stood still with spark plugs you'll move forward from 4 to 6 miles an hour with the Igniters while not touching the gas pedal! The gas that was required with spark plugs in your car merely to idle your motor without being able to move it forward, carries you forward up to six miles an hour with Igniters in the engine! One more final thing — with spark plugs a car must be looked over and adjusted several times a year. You know that from your own experience. But can you appreciate the concept of never, never having to remove or change spark plugs because you don't carry any? The concept of Fuel Igniters becoming permanent installations in your engine — for the life of your engine?

"Yet, with all this—believe it or not—I still haven't fully answered your question. . . . How you'll use more air and less gas . . . the savings on your battery . . . increased RPM . . . how carbon — the enemy of spark plugs — actually increases the efficiency of Fuel Igniters. But what I've tried to say is that the spark plug is as inferior to the Fuel Igniter as the wagon is to the modern automobile. And just as out-dated. Auto mechanics know this now. The ordinary motorist is learning about it fast."

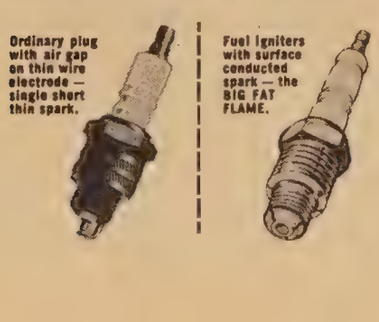
"One last question: What about Detroit, Col. Dollenberg? Do you feel you're fighting a crusade?"

Dollenberg looked out of the window, out into the dusk of the city. There was a reflective quietness about him as he thought of his reply. Then he said: "No, we don't believe we're fighting the big spark plug manufacturers. Oh, there's bound to be a competitive fight soon because it's a matter of only a short time before these giants will all scrap their investments in the obsolete spark plug and turn to the manufacture of fuel igniters. Meanwhile — to put it quite candidly—there is, of course, that huge investment in stocks of spark plugs to liquidate and while the big fellows are attempting to unload, LECTRA will be booming along." The grin came out again as he said: "I hope they take their time about it. At the rate we're going we'll be big enough to take care of ourselves shortly."

I got up to go, convinced that Dollenberg's quiet confidence was well-founded. The product and the man were right for each other. Here's an incident which impressed me. A short time ago, LECTRA ran a mail order advertisement in the sober *New York Times*. One of the replies they got was from a gentleman in Pennsylvania who put it to LECTRA right on the line. Said the Pennsylvania man:

"I've read your ad in the *New York Times*. What I want you to do before I order a set is for you to send me a copy of that ad through the United States mails. Then if your Fuel Igniters won't come through with all those fancy promises — and if you don't send my money back if they don't perform as you say — I'll have Uncle Sam on my side while I go after you." The hard-bitten Pennsylvania man was sent the ad through the mails, all right. And he ordered a set of Fuel Igniters. LECTRA wasn't fearful that Uncle Sam would be after them. Because—and here was the kicker—Uncle is a LECTRA customer! Many military installations have field-tested the Fuel Igniter. As a result of these field tests, many thousand Fuel Igniters have been purchased by these government units.

So that's the story of The Big Fat Flame. I'm leaving a little space for a message from Col. Dollenberg. Meanwhile I'm on my way outside to the garage with my set of Fuel Igniters. I can't wait to get rid of those spark plugs!


Ordinary plug with air gap on thin wire electrode — single short thin spark.
Fuel Igniters with surface conducted spark — the BIG FAT FLAME.

This article has been presented both as an advertisement for the Lectra Fuel Igniter and as a public service. Especially do I wish to emphasize the words **public service.** It is flattering to be imitated, it is said, but since the invention of the Lectra Fuel Igniter, there have appeared so-called "imitations" which have failed to perform as promised.

We state, flatly and sincerely, that we can back every claim that appears in Mr. Mayer's story. Please look very carefully at the table which follows. The fuel consumption figures in this chart are compiled from extensive field tests by industrial and private users.

RECORD OF PERFORMANCE—LECTRA FUEL IGNITERS

NOTE—All Lectra-equipped cars in these tests used REGULAR GAS
(compiled from survey reports and field tests)

YEAR	Make of Car	Spark Plug Miles Per Gallon	Lectra Fuel Igniters Miles Per Gallon	Miles Increase	(Gain) Extra Miles Per Gallon
1956	Chevrolet V8	17.7	22.2	24%	4.5
1955	Nash Rambler	20.0	27.6	38%	7.6
1954	Plymouth 6	22.2	26.0	17%	3.8
1955	Ford Fairlane	14.0	21.2	50%	7.2
1957	Chrysler Windsor	16.5	21.0	20%	3.5
1954	Oldsmobile 98	15.5	18.0	14%	2.5
1957	Dodge D-500	16.0	21.5	35%	5.5
1951	Buick Super	13.0	17.0	22%	4.0
1956	Plymouth V-8	16.0	20.0	25%	4.0
1955	Oldsmobile 98 (air-conditioned)	15.0	20.9	40%	6.0

All above figures confirmed by letters and reports available from our files in New York City.

Nothing is as exacting—as compromising—as cold statistics. In the final analysis, nothing will prove to you the extraordinary benefits of the Lectra Fuel Igniter as its performance in your own automobile.

Therefore we guarantee (and stake our reputation and our business on this guarantee):

That Lectra Fuel Igniters must be everything we say they are, everything we have led you to expect. They must make your car perform as you never thought it would and on **regular gas.** You must IN YOUR OWN JUDGMENT get easier starting, faster pick-up, improved economy (to conform to the table above) or you can return them after a 10-day trial and get back every cent you paid—without question and without delay. What's more—they must **continue to function** properly for the life of your car or they will be replaced until they do.

We've taken a lot of your time in presenting our story. Now there's nothing else to say; the rest is up to our Fuel Igniter. If you want to try them (bear in mind our guarantee) they will be rushed to you as soon as we receive your order. For your convenience we are adding a coupon to the bottom of this page. If you'll fill it out and mail it I can promise you the most exciting automobile experience you've ever known.

Sincerely, Fred P. Dollenberg

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☐ I enclose $16.80 for 8 Igniters

☐ I enclose $..... for ..... Igniters at $2.10 each

☐ Send ..... Igniters C.O.D. I enclose $1 deposit and will pay postman balance on delivery plus shipping charges.

My car is ..... year ..... make ..... model

..... no. of cylinders

Name .....

Address .....

City ..... Zone ..... State .....

surface plan would cost $500 million but monorail only half that price, and if he gets an OK he will begin at once. We thank a DCTC bus driver, John McMerrick, for these facts.

ALASKA, 49th star in the American flag, is the only state that never had trolley cars, and its capital, Juneau, is in the same class with Dover, Dela., neither of which have had a streetcar line, comments H. H. Diers, 4722 Chesapeake St., N.W., Washington, D. C. Another state capital, Tallahassee, Fla., never had trolleys but boasted a mule-car rail line that quit long ago. We'd like to see a photo of it.

THE ICC allowed Chicago, Aurora & Elgin to stop running its electric freight service June 10, due to lack of funds to carry on after that date, and issued an emergency order permitting the Burlington, the Illinois Central, the Milwaukee, and the Indiana Harbor Belt to use CA&E tracks to serve industries along its route. Several years ago CA&E gave up passenger service as a *temporary* measure while the Congress transit route was being built. The company said it had planned to resume passenger operation, but it never did. Money ran out.

TORONTO'S newest subway line, the Bloor-Danforth-University, will be ten miles long, have 25 stations, utilize 280 cars, and carry an estimated 345,000 riders daily, according to Ralph McConachie, 853 Lansdowne Ave., Toronto, Canada. Eventually it will replace the Bloor surface lines which now use MU trains. Although ground was broken in Sept. '58, the new line will not be in full service for ten years (instead of three as planned at first). Part of the route will use Prince Edward Viaduct, in the eastern part of the city, which was built about 1918 with steelwork and supports originally intended for subway use.

Toronto Transit Commission owns 744 PCC cars, of which 175 are MU, running mostly on the Bloor route, Canada's only surviving streetcar system. Ottawa's final line, the Britannia-George Loop, quit May 1. Its cars were the last deck-roof trolleys operating in North America.

A FEW months ago we told how Rev. Floyd Gurley had tried to restore the Pacific Electric interurban system to its former glory at the request of minority stockholders fighting the proposed bus plan. Louis Ayres, Elizabethtown, Kan., who was a PE motorman at the time, writes that Gurley could have made a great electric railway system had he been allowed to do so. Why he was checkmated is best known to majority stockholders. Later, Gurley became president of a telephone company in Kansas. He is living today at Colony, Kan., and dabbling in the model railroad hobby. "His success in the telephone business," adds Louis, "indicates what he might have done for PE had he been listened to instead of being fired."

OLD Interboro Rapid Transit type cars, used for many years in New York subways, are disappearing fast, reports Elliot M. Block, 84-49 Elmhurst Ave., Elmhurst, N. Y. On New York's West Side a $100 million project has brought new lighting at stations, new cars, and lengthened platforms. The remaining old cars have had their marker lights electrified, replacing oil lamps and putting six oil-lamp men out of work. When renovation of the West Side IRT line is completed, the once-familiar old IRT cars will be left only on two East Side express lines.

DOWN in Alabama, which has no more streetcars, some electric lines are still hauling freight, writes Thomas Lawson, Jr., 2533 Montevallo Rd., Birmingham, Ala. There are two center-cab juice locos of Dearborn Coal Co. at Holt, ½-mile track; two juice locos at Woodward Iron Co., Woodward; three juice locos on side-rail at Alabama By-Products Co., Tarrant City, ¼-mile track, and one juice loco at a North Birmingham lumber plant, a block of track. ●

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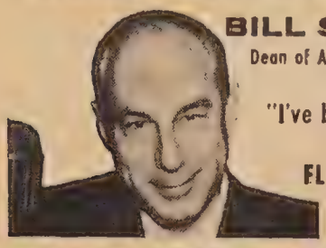

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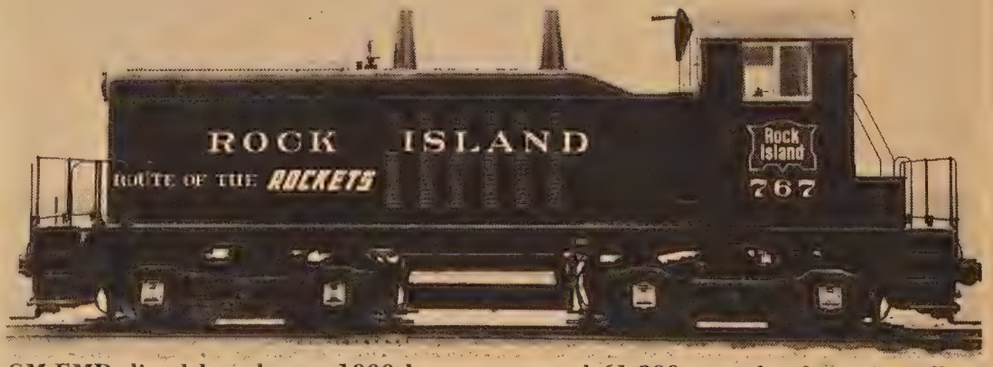
Stephen D. Maguire, 1411 River Rd., Belmar, N. J.

FLORIDA EAST COAST RAILWAY

Roster Compiled by Sy Reich

Road Numbers	HP	Builder	Builder's Model	Wheel Arngt.	Tract. Effort	Weight	Built
221-228	1200	GM-EMD	SW-9	B-B	60,700	244,500	1952
229-235	1200	GM-EMD	SW-1200	B-B	61,000	244,500	1954
501-508	1500	GM-EMD	F-3A	B-B	56,000	224,000	1949
551-554	1500	GM-EMD	F-3B	B-B	54,300	217,000	1949
571-575	1500	GM-EMD	FP-7	B-B	60,600	242,000	1951
601-606	1500	GM-EMD	BL-2	B-B	55,600	222,000	1948
607-621	1500	GM-EMD	GP-7	B-B	60,000	240,000	1952
651-676	1750	GM-EMD	GP-9A	B-B	59,300	237,000	1954,'7
1001-1002	2000	GM-EMC	E-3A	A1A-A1A	51,000	300,000	1939
1003-1005	2000	GM-EMD	E-6A	A1A-A1A	51,300	304,000	1940,'2
1006-1022	2000	GM-EMD	E-7A	A1A-A1A	52,300	310,000	1945,'7
1031-1035	2400	GM-EMD	E-9A	A1A-A1A	54,000	320,000	1955
1051	2000	GM-EMD	E-6B	A1A-A1A	50,600	300,000	1942
1052-1054	2000	GM-EMD	E-7B	A1A-A1A	50,300	300,000	1945

(Compiled from data supplied by Chief Mechanical Officer, FEC. Accurate as of June 1, 1959. Abbreviations used: GM-EMD—General Motors, Electro-Motive Division, GM-EMC—General Motors, Electro-Motive Corporation.)



GM-EMD diesel loco boasts 1000 horsepower and 61,800 pounds of tractive effort.
Rock Island Lines

Chicago, Rock Island & Pacific

Roster Compiled by Sy Reich

Road Nos.	HP	Builder	Builder's Model	Wheel Arngt.	Tract. Eff.	Weight	Date	Note
1	1200	GM-EMD	LWT-12	B-2	30,600	188,900	1956	
38-40 42-49	1350	GM-EMD	F-2	B-B	57,400	229,700	1946	
70-77	1350	GM-EMD	FT	B-B	56,600	226,500	1945	
70B-73B	1350	GM-EMD	FT	B-B	53,400	213,400	1945	
88-99	1350	GM-EMD	FT	B-B	56,800	227,000	1944	
88B-96B 98B-99B	1350	GM-EMD	FT	B-B	54,500	217,800	1944	

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100-119	1500	GM-EMD	F-7	B-B	57,200	228,600	1949	
100B-109B	1500	GM-EMD	F-7	B-B	55,500	222,100	1949	
120-127	1500	GM-EMD	F-7	B-B	57,500	230,000	1951	
120B-123B	1500	GM-EMD	F-7	B-B	61,900	247,500	1951	
128-143	1500	Alco-GE	FA-1	B-B	58,700	234,700	1948	1
128B-135B	1500	Alco-GE	FB-1	B-B	56,800	228,200	1948	2
145-160	1500	Alco-GE	FA-1	B-B	58,000	232,000	1948	1
145B-152B	1500	Alco-GE	FB-1	B-B	56,300	225,000	1948	2
345-350	180	Dav.-Bess.	30-ton	—	15,100	60,300	1940-'1	3
351	264	Dav.-Bess.	44-ton	B-B	22,000	88,000	1939	
361-366	360	Dav.-Bess.	44-ton	B-B	22,200	88,800	1939-'40	
367-371	360	Whitcomb	44-ton	B-B	22,200	88,800	1940	
372-376	360	Dav.-Bess.	44-ton	B-B	22,200	88,800	1941	
377	360	Dav.-Bess.	44-ton	B-B	22,400	89,300	1942	
400-401	1600	FM	ALT 200.2A	B-B	65,300	261,000	1948	*
402-411	1500	GM-EMD	FP-7	B-B	63,000	252,000	1949	
425-429	1500	GM-EMD	BL-2	B-B	60,700	242,200	1949	
430-441	1500	GM-EMD	F-7A	B-B	61,700	246,200	1950	
450-454	1500	Alco-GE	244-B	B-B	58,300	233,000	1948	*
456								
455,	1600	Alco-GE	RS-3	B-B	61,900	247,400	1950	
457-456								
470-474	1600	Alco-GE	RS-3	B-B	60,900	243,500	1951	
485-499	1600	Alco-GE	RS-3	B-B	64,300	257,300	1951	
500-528	600	GM-EMC	SC	B-B	50,000	200,000	1937-8	
529-536	600	GM-EMD	SW-1	B-B	48,400	193,500	1942	
537-546	600	GM-EMD	SW-1	B-B	48,900	195,800	1949	
550-563	660	GM-EMD	SC	B-B	57,600	230,500	1957	
598-599	660	Alco-GE	M&S	B-B	50,000	199,000	1941	4
601-606	1200	GM-EMC	TA	B-B	56,600	226,400	1937	5
621-623	2000	Alco-GE	PA-1	AIA-AIA	56,700	226,600	1940-'1	6
625-626	2000	GM-EMC	E-3A	AIA-AIA	53,200	315,700	1939	
627-631	2000	GM-EMD	E-6A	AIA-AIA	53,200	315,700	1940-'1	7
632-642	2000	GM-EMD	E-7A	AIA-AIA	53,700	319,000	1946,'8	
633B-634B	2000	GM-EMD	E-7B	AIA-AIA	52,700	313,700	1946	
637B-642B	2000	GM-EMD	E-7B	AIA-AIA	52,900	314,500	1946,'8	
643-656	2250	GM-EMD	E-8A	AIA-AIA	56,000	332,700	1949-'53	
675-677	1500	GM-EMD	F-7A	B-B	60,800	243,000	1949	
675B-677B	1500	GM-EMD	F-7B	B-B	62,200	248,600	1949	
700-706	900	GM-EMC	NC	B-B	63,100	252,400	1938	8
716-720	1000	Alco-GE	M&S	B-B	57,500	230,000	1948	
721-729	1000	Alco-GE	M&S	B-B	56,900	227,600	1942,'5	
730	900	Alco-GE	M&S	B-B	57,800	231,200	1939	
735-745	1000	Alco-GE	M&S	B-B	59,500	237,800	1944,'3	
750-751	2000	GM-EMD	AB-6	AIA-AIA	54,000	321,000	1940	9
758-759	1200	BLHW	S-12	B-B	59,900	239,400	1953	
760-764	1000	Baldwin	VO	B-B	59,500	237,800	1943	
765-774	1000	GM-EMD	NW-2	B-B	61,800	247,200	1948,'9	
775-779	1200	GM-EMD	SW-9	B-B	61,700	246,500	1953	
795-797								
798-799	1000	Dax.-Bess.	SW	B-B	56,400	225,400	1950	
800-801	800	Lima-Ham.	SW	B-B	56,900	227,400	1950	
802-806	800	BLHW	SW	B-B	58,500	234,000	1952	
811-813	800	GM-EMD	SW-8	B-B	58,200	232,800	1950	
814-838	800	GM-EMD	SW-8	B-B	57,400	229,600	1952-'3	
839-840	800	GM-EMD	SW-8	B-B	57,300	229,200	1953	10
1000-1015	600	Whitcomb	SW	B-B	37,500	150,000	1950-'1	
1200-1237	1500	GM-EMD	GP-7	B-B	61,000	244,000	1951	
1250-1311	1500	GM-EMD	GP-7	B-B	64,300	257,000	1952-'3	
1312-1321, 1323-1332	1750	GM-EMD	GP-9	B-B	58,875	240,000	1957	

Miscellaneous Notes

Roster compiled from data supplied by General Superintendent, Motive Power, CRI&P; accurate as of June, 1959. Abbreviations used: GM-EMD—General Motors, Electro Motive Division; Alco-GE—American Locomotive Co.-General. Electric; Dav.-Bess.—Davenport-Besseler; FM—Fairbanks Morse; GM-EMC—General Motors, Electro Motive Corp.; BLHW—Baldwin-Lima-Hamilton-Westinghouse; Lima-Ham.—Lima-Hamilton.

* Repowered EMD in 1958.

(1) 145-160 rebuilt by GM-EMD in 1955, renumbered 128-143.
(2) 145B-152B rebuilt by GM-EMD in 1955, renumbered 128B-135B.
(3) Had 5-speed mechanical transmission. These locos scrapped.
(4) Ex-Pullman Railroad 20-21, purchased 1949.
(5) Scrapped.
(6) 621 has EMD motors, installed July, '53.
(7) 627 scrapped.
(8) 701 rebuilt by CRI&P with Alco-GE motor.
(9) 750-751 rebuilt 1948-'9.
(10) Ex-Wichita Fall & Southern 801-802, purchased in 1954

Without a Train Dispatcher's Authority

IMPRESSED by the initiative described in Harry Bedwell's story, "Pacific Electric" (Aug. issue), Thomas O. Acree recalls how he himself handled a certain emergency 50 years ago. Tom is a retired train dispatcher (P.O. Box 724, Hollywood 28, Calif.).

"At age 22," he writes, "I was a telegrapher working night shift (7 p.m. to 7 a.m.) on the Southern's 166-mile Danville Division at Lynchburg, Pa. In those days we had no double track, no automatic electric signals, no train dispatching by phone. That winter our passenger trains ran badly off schedule, due to sleet and snow. Hardly a night passed without some wire failure which cut me off from the dispatcher and many other stations.

"On several nights in a row, without authority, I dispatched trains boldly from Monroe southward to any point I could reach, usually Franklin Jct. (now Gretna). I'd get the operator there, FK, to ground the wire to the south, thus giving me about 43 miles of wire to work with, in an effort to keep the trains rolling. I didn't worry about northbound trains; they had right of track over southbounds of the same

February Issue, Out Dec. 1

will feature "Woodburning Engines" by Bill Knapke; the story behind 135,000 refrigerator cars by Dave Marshall; "Desert Job" by Harry Bedwell; rosters, good pix, departments, and a steam cover in full color. (Coming soon: "Consolidation Type Engines" by H. L. Kelso.)

class. But southbound No. 29, 31, 33, 37, 39, and 41 could not leave Monroe without orders against Nos. 30, 32, 34, 38, 40, and 42.

"Meanwhile, the Washington Division wires north of Monroe were functioning, so I could get figures from the Monroe operator on the expected arrival of southbound trains at Monroe. I improvised a train sheet and train-order book for an accurate record to transfer to the dispatcher whenever I could contact him. I used train-order numbers different from those the dispatcher used so there would be no conflict later on when the wires were OK again and I was off duty. To simplify matters, I placed a '31' order with the FK operator, addressed to all first-class trains north, and a '19' with the Monroe man, addressed to all first-class trains south. It read: 'All southbound first-class trains have right over all northbound first-class trains, Monroe to Franklin Jct.'

"I couldn't always make it so simple. The FK operator knew the general location of some northbound trains, so I had to figure out direct meet orders for southbound trains with northbounds at points between Monroe and FK.

"With six years' experience, I felt justified. I just couldn't sit there and see the trains standing still. But after going off duty I did not sleep well.

"In issuing the flimsies I did not use the dispatcher's call, NI, but my own, BD. However, I signed the division super's name to them. If any train crew had known who was actually putting out the orders they might have refused them. Eventually the chief dispatcher learned what was going on and sent me this message, by a roundabout way: 'Keep trains moving until wires are restored.' That made me feel good. And after 50 years I still have the letter I received from the super backing me up." ●

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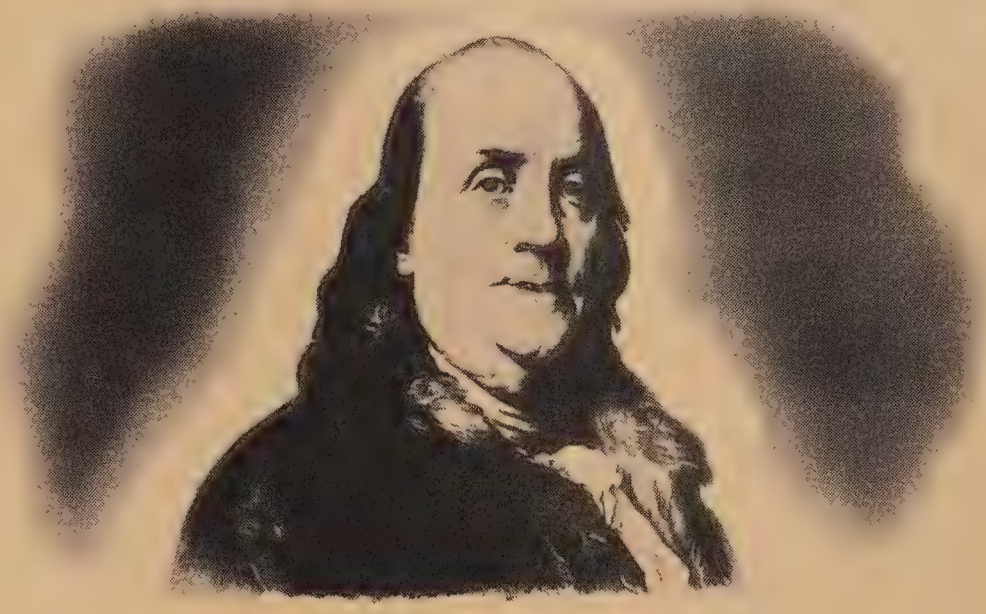

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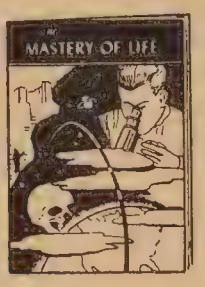

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HOLIDAY WEEK-END

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Eddie Sand Used His Bag of Tricks to Keep the Pacific Electric Out of Trouble

by HARRY BEDWELL

FOURTH OF JULY came on a Saturday that year. Eddie Sand, a Pacific Electric tower operator at the Watts interlocking plant, had encircled the date on his wall calendar with red crayon. Not that he was kidding anyone. The slim, carrot-topped boomer knew that holidays and week-ends were as grueling for the employes of interurban lines as they were for steam-road men, only more so.

He sighed as he recalled the hard tramp of Mallets on Sherman Hill and heard in his mind their thunderous exhaust and their lonesome whistles and saw their great, endlessly-rolling smoke plumes. Watts tower lacked many of the sights and sounds and smells of the steam railroading he'd known and loved for years. True, the Southern Pacific, then a steam road, owned the Pacific Electric, and one of these days, he decided, he was going to hit the the boomer trail again—with an SP pass.

Meanwhile, he had a job to do on the interurban. After weeks of high fog and dull, chilly weather the sun blazed forth like molten copper. The California hinterland sweltered and people became restless for the sea and its cooling air. Residents and tourists alike moved toward the beaches.

When the inhabitants of a thickly populated area converge on a narrow strip of sea coast, traffic jams are inevitable. Pacific Electric swung its equipment into the rush. The company's shops pushed all repair jobs. Older cars pulled from the storage tracks for quick inspection would be strained to take the human flood to the shore, beginning Friday. At Sunday noon the tide would turn and that entire horde would clamor to go home, and quickly.

National holidays and week-ends were not recreation periods for operating men of the Pacific Electric. Ticket clerks faced queues of eager travelers while little bits of cardboard dropped incessantly from the pounding daters. Conductors wedged their way into and through crammed cars to collect fares. By the end of day they felt as if they had been through a mangling machine. Motormen developed a slight cast to their eyes from straining them both ways at once in approaching grade crossings where motorists pounded across the line. At the same time they had to keep at least one eye on the way ahead, for trains were close-strung and could be slowed and stalled at any instant.

The dispatcher played the keys of his switchboard with dancing fingers as reports of arrivals and departures, delays, and distress calls poured in. And the stationmaster, who dispatched the equipment, had to fill demands for cars whether he had them or not.

For two afternoon tricks Eddie Sand had been watching the swarms roll by under his tower and empty cars return like loose beads on a string. The tide of traffic had just turned when he came on duty Sunday afternoon. Cool dampness filled the air, and excursionists began to desert the shore. Packed trains wheeled up from the beaches.

Eddie paced the bank of levers ceaselessly, notching them out and in. He kept the opposing lines moving steadily through the interlocking plant as he swung the trains in and out of the main current from converging lines. A second now was a

considerable stretch of time; a minute wasted could mean a bad snarl and tie-up.

From Newport and Balboa, Long Beach, San Pedro and Redondo, the trains rolled by in a swelling stream, while the outbound main line surged with deadhead equipment going back for more. This would continue into the next morning.

THE AIR thickened in late afternoon. The sun had turned a deep red when a four-car train paused by the station across the way. Superintendent O. P. Donaldson, disengaging himself from the jam on the rear platform of the last car, got down the steps. He came across the four tracks and climbed the tower stairs.

His steps dragged a little. He hadn't slept much for two nights. With a smile and a nod he dropped into the chair beside the little desk, took out a cigar, lit it, and puffed gently. At length he inquired, "Everything moving all right?"

"Not a break yet," answered Eddie.

Mr. Donaldson studied the operator pacing the long board with quick, assured stride. "I notice one reason why you're able to keep the schedules so well."

The boomer raised an eyebrow as he cut a Redondo car into the inbound torrent.

"It's because of your long legs," the super said amiably. "They cover a lot of ground." The Old Man was weary but not depressed. A trace of a grin crossed his face. "Has Burton been in here lately?"

Eddie said he hadn't. For some reason or other, Trainmaster Burton had taken a dislike to boomers in general and Eddie Sand especially.

Mr. Donaldson puffed in silence. "He's down at Wilmington this evening, lining up the specials to bring the crowds back from the Catalina boats." The low sun was smouldering behind a bank of gray mist. "There'll be a fog tonight," O. J. predicted.

Tired lines etched his face as he stared at the motor traffic choking the thoroughfare at the crossing of the four tracks.

"If we can get through this busy holiday week-end without tangling with an automobile," he said, "*The Sentinel* will pull off its 'Red Reaper' campaign. At least, so I hear."

Eddie knew what he meant. The local newspaper had been waging a "crusade" against the Pacific Electric Railway because of grade-crossing accidents involving the big red interurban cars and the ever-increasing number of automobiles, the phrase "Red Reaper" being tied in with the color of PE cars. Eddie knew, too, that bungling methods of Trainmaster Burton had played into *The Sentinel's* hands.

"I wish they'd drop it," he growled, "but maybe it's too much to hope for, with all those machines on the concrete and all the trains we're running."

O. J. walked to the doorway. "I must get back to Sixth and Main (PE headquarters in Los Angeles) and see how things are lined up

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there. Take it easy, now, Eddie."

With that he stamped down the stairs. Damp twilight was closing in. Street lamps and the lights of the interlocking plant winked on. Misty halos clung to each gleaming point. Pretty soon a thick fog rolled up from the ocean and shut the tower in a cramped gray circle through which the lights glowed obscurely.

Clamor of traffic increased. The wet air was confused with indistinct warning air whistles and gongs, the far calls for signals, and the abrupt and urgent demands for flagmen to protect. Automobile horns honked. Fog clung to windows and dripped from eaves. Vision from the tower was restricted to the hazy ring through which the blinded trains moved at reduced speed. The nearer signal lights were wisps of vague color.

EDDIE could see little of the operations he directed. The enunciator croaked and the frosted disk of the approach indicator glowed. He moved the big red trains in their appointed grooves by these signs.

Southbound, the deadhead trains picked up speed the instant they were certain the highway crossing was clear for them, the motorman notching out his controller handle for a dash along the protected right-of-way. Northbound trains, with their packed loads, nosed up to the crossing, clanging their gongs to clear the way of crawling highway traffic.

Low-swung locals fumbled out of the murk and turned into the barn. The outbounds banged across to the opposite side and crept away toward the city.

A freight train of loaded tank cars moaned from the Redondo line and held up all other trains while Eddie sent it across to the farther side of the four tracks. The great electric locomotive muttered with stubborn power. Heavy tank cars stumbled over the switch points.

Trains from north and south eased up to the misty red home signals, pleaded for the board, and then blew out their flagmen. Off to the east, a lone Santa Ana car called wistfully. It was lost in the far murk. A local poised on the siding below ready to follow the freight across when Eddie Sand gave him the signal. All that rail traffic, save the worming oil train, paused in the gray blanket awaiting the tug of the levers.

The caboose rocked on the crossover and its tail lights died quickly in the fog. Eddie gave the local the go-ahead and it scuttled across and cleared. He let the Santa Ana in, then started the ceaseless flow along the main line. Whistles piped as the trains took up their blind way through the night.

Beyond the four tracks, a little south of the tower, a paved street coming east turned in a short curve as it broke off at the railroad and swung northward beside the right-of-way. Eddie became aware that much motor traffic had developed on this side street.

An Oldsmobile stormed out of the fog and rode the outside curb as the driver belatedly checked and swerved, and its momentum flung the machine across the street. Feminine screams added to the other night noises as the Oldsmobile straightened out and roared up the street.

It's good that corner curves instead of breaking at right angles, Eddie thought, *else some of those people might land in my lap.*

The last of the Catalina specials rolled dripping out of the fog and paused an instant at the passenger station. Trainmaster Burton got off the rear end and turned toward the tower.

Eddie groaned: *If ever I had any chance of getting through this evening without bad trouble, it's sure busted now.*

BURTON caught sight of two figures above him on the high freight platform at the rear of the station. He paused and peered, then took some furious steps toward them. The two men stood fast and glared down at the trainmaster. Eddie watched them through the mist. One was short and burly and carried

photographic equipment. The other was thin and slightly dented in the middle.

Well, if it isn't the newshawks from The Sentinel! Eddie thought uneasily. *I wonder how they can take pictures in this light.*

The trainmaster boosted himself onto the high platform and faced the two men. He gesticulated with his head thrust forward. The reporter stood fast and apparently answered him pugnaciously. The talk lasted some minutes, but the newshawks remained on the platform when Burton turned away.

The T.M. tramped across the tracks toward the tower. The structure shook to his ponderous tread on the stairs. He heaved into the room and eyed Eddie darkly.

"Those two newspaper men are hanging around here again," he accused.

"So I see," Eddie agreed.

"And you didn't do anything about it?"

"Well, no," the boomer admitted. "There isn't much to be done. You can't legally run them off property dedicated to the public use. You might get yourself in jail and the company in a jam if you use violence."

Burton sat down at the desk and stared at the two figures still on the platform. He took out a toothpick and chewed it vindictively.

A sudden stiff breeze blew in from the sea. The mist frothed like suds. Wind tore a rent in the gray curtain, showing the moon for a brief second. Then the rift closed and the blanched circle crept back about the tower.

The elements of accident were fusing fast out there in the thick mist. Eddie leaned out the window, straining to locate them. Two dim blobs of light burned through the curtain beyond the four tracks. They were the headlights of an automobile on a blind detour, coming rapidly up the side street from the east. The throb of its engine deepened as the headlights broke out of the fog.

That motorist was driving too fast to make the turn. He was well into the curve before he discovered that the four tracks blocked his way. Then, without much judgment, he set his brakes.

Skidding tires made a high, terrified screech. The two headlights slewed to the right and bounced. They reared as the front wheels struck the curb and leaped the low embankment. The car swerved to the right. Somehow it cleared a line pole and guy wire, and turned sidewise as it struck the first rail.

A high scream floated in the fog. Rubber tires chewed frantically for a hold on oiled ballast and damp steel. The car was an open model with windshields in front and back. Dimly you could see four muffled occupants in the careening vehicle as it tipped over on its side, tossing the figures out across the rails of the main line.

One figure struggled to rise but collapsed and lay still. None of the

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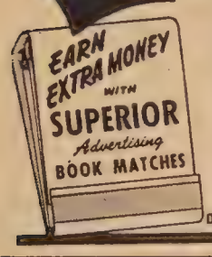

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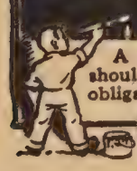

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others stirred. The dark bundles weren't very distinct under the dull opposing beams from the headlights of trains approaching from north and south.

A FIVE-CAR train of empty equipment rolled out of mist from the north. It had just cleared the crossing and was picking up speed. Close in from the south, clear of the home signal, a three-car train jammed with passengers was already sounding her warning for the highway. The two trains would pass each other just beyond the tower at about the point where four figures were sprawled across the rails.

Mist made the light tricky. Fog blurred front windows of the cars through which the motormen peered, and motormen's eyes became tired with ceaseless, straining vigil. Dark bundles on the right-of-way might be sized up as floating spots in the vision, or not seen at all.

That toothpick now hung loosely from Burton's open mouth. The trainmaster stared hard at the dim picture down there. But he couldn't make it register.

The automobile hadn't stopped bouncing when Eddie snatched a fusee from the shelf at his left hand. He lit it, leaned from the window, and flung it southward. The fusee spluttered into smoky fire as it arched and fell between the main-line tracks. Its light bloomed into a misty red balloon. A glimpse of that, and a motorman of the southbound train would dynamite the brakes.

Hanging out the window, Eddie listened through an interminable second for the snarl of compressed air and the slam of brakes. But nothing interrupted the smooth whimper of wheels and drone of motors. Eddie caught a dim glimpse of the motorman through the dampened front windows against the background of lights inside the car.

The motorman had been standing up at his controls through the city's fogbound traffic. That was the order when the going was obscure and crowded. Now that his train was in the zone free of street and highway hazards, he had turned to drag his stool from the corner behind the railing, to adjust it under him for a comfortable seat to the end of his run.

For that instant his eyes were turned from the main line. He hadn't yet seen the red flare on the track!

If Eddie were down there on the ground twenty feet below and a dozen jumps away, he could roll the switch that would swing the train through the local line crossover and away from the limp figures draped over the rails.

This lightning thought kicked the boomer like high voltage. He crowded his long legs through the window sidewise, somewhat of a contortion, barely broke his fall with a sliding grip of fingers on the ledge, and twisted as his feet struck the ground. His legs reached out as he plucked his key ring from his pocket, sprinting for the switchbox.

IT wasn't easy to see the protruding rails in the muffled flare of the headlight facing him, and the uneven oiled ballast was greasy with fog. But you'd better not slip or stumble. You couldn't trust the fender on the front of the car to pick you up if you fell flat in front of the rolling wheels.

Eddie reached the box with his last stride. The train loomed over him, vague with lights for its entire length. His blind fingers fitted the key into locks and twisted. He flung back metal lids, and his hand slid over the mechanisms inside.

Instantly his fingers found the brush and raised it to cut out the motor, and he gave the gear-wheel a fierce shove to throw the points over. He shot a spike into the hole in the tie and got clear just before the front wheels could beat him to it.

The thin whine of wheels changed to a slam and grunt as the head car swerved right and took to the crossover. Eddie heard a profane yell as the motorman, still wrestling with his stool, was thrown off balance.

Car wheels slammed at the switch-points and the train headed for the car-barn siding. The power snapped off and the sigh of the motors died

as the motorman released the controller and it shot back to neutral. Then he shoved the brake-valve handle over. The northbound train stopped beyond the thin red balloon that arose in the mist.

Breeze rifted the fog, and the moon beamed placidly through the gray curtain. Headlights and street lamps, tinted by the flare of the red fusee, made a misty radiance over the disorderly scene.

The newspaper photographer moved quickly, shooting flares and snapping his camera. The thin reporter seemed to be acting as his assistant. These two fellows came toward the tower man.

Eddie swore, hastily untangled his legs, and stood up. "I'll look like hell in this picture," he said.

Some trainmen came hurrying from the barn while others dropped from the two trains. The prone figures draped over the rails began to sit up. *The Sentinel's* camera man was still shooting.

Eddie turned back to the tower, his post of duty. Mr. Burton, who was still peering from the open window, wheeled as the operator came back into the room. He shoved past Eddie through the doorway and thundered down the stairs.

A little late, but he'd finally realized there had been a misadventure and it was up to him to take charge, to get the trains moving before the holiday traffic snarled into a jam, and to check the injured people and get witnesses.

But he wouldn't have called the dispatcher, and that man should know at once. Eddie unhooked the telephone receiver. The dispatcher had somebody on the pan, and Eddie held the receiver to his ear and studied the scene below while he waited.

BURTON projected himself into the picture. He closed in on the photographer at a flat-footed run and tried to snatch the camera, but the burly man elbowed him off. The thin reporter joined in, and the two men from *The Sentinel* jostled Burton and edged him away.

As trainmen crowded in, the trainmaster yelled at them: "Here, you fellows! Break that camera and throw those two guys off the company property! Hurry, before they get away!"

UP in the tower, Eddie reacted quickly. Burton, he decided, was acting like a fool.

The Sentinel's editorial writer would really crucify the Pacific Electric if one of their officials assaulted the paper's employes on duty and broke up some valuable equipment. Eddie slid the receiver back upon the hook and vaulted down the stairs.

He skidded through the gathering crowd of passengers, took Trainmaster Burton by the arm, and swung him about.

Burton was furious and swung a hamlike fist at Eddie. The boomer clipped him with a lightning right to the chin. It seemed the only thing left to do.

Burton staggered away, shaking his head to rid it of the bees that buzzed inside.

Eddie motioned to a pair of motormen. "Take him to the barn," he said.

Then he rounded up three more trainmen and told them briefly: "Heave that automobile off the main line. Check those four who were in it and find out if any are hurt bad enough to send for an ambulance. Get their names and addresses and have them wait here till I rouse out someone to come down from the claim office."

The boomer was taking charge of a tough situation. He addressed the conductors of the two trains in the plant. "Get your passengers aboard and line up your trains so you can start moving before we're all jammed up."

Then he turned back to the tower. The thin reporter, pacing beside him, said, "That's a nifty right you have."

Eddie kept a straight face. "He stood still. It wasn't much of a shot."

"Mind telling me your slant on what happened?" the reporter asked. "It won't hurt to get all the angles."

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"Come on up into the tower. I'll answer you while I get these trains moving again."

THE RINGING telephone awoke Eddie next morning. He wasn't surprised. He knew the news before it came over the wire. Mr. Donaldson's chief clerk said the Old Man wanted to seem him in his office *right now!*

In the light of the morning after, Eddie could think of a dozen better ways of restraining Trainmaster Burton than socking him on the chin. They'd nail his hide to the car barn for that.

When he arrived at the Super's office, the clerk said O.J. was upstairs and would Mr. Sand please wait.

An hour later, Mr. Donaldson came in. He waved Eddie into the inner office. The Old Man was slightly bemused. That seemed ominous. He tilted his swivel chair and spread out *The Sentinel* on the table.

"Seen this yet?" he inquired.

Eddie hadn't. Said he'd been afraid to look. The front page was spotted with dim pictures of an overturned automobile, and people stretched over the rails, and crowds milling between two electric trains. There was one of Eddie crouched alertly beside an interurban car. The caption said that this tower operator, risking his own life, had saved a careless driver from almost certain death under the wheels of a train.

Headlines read: "Reckless Driver Invades Railroad Line Far From Crossing. Occupants of Automobile Escape Death Through Heroism of Interurban Employe."

The article beneath might have been written by the Pacific Electric's own Publicity Department. *The Sentinel* aimed at heedless motorists and let go with both barrels. Then it dripped kind words for the interurban company's constant vigilance to avoid crossing accidents. It pointed with pride to its holiday record of no grade crossing accidents despite the number of automobiles speeding across its lines.

Eddie put down the paper with a sigh. "Sweet!" he murmured. "Just ducky."

Mr. Donaldson nodded. "That's what the general manager thinks," he said. "I've seen him. But consider what would have happened if Burton had snatched that camera and destroyed it, then had the trainmen throw *The Sentinel's* men off the property. In that case the story wouldn't have been so sweet. It's known all over upstairs that you saved us there. And you gave the reporter most of the dope he wrote about."

"I told him what happened."

"I know," said Mr. Donaldson.

Eddie waited for the bad news while O.J. lit a cigar and began puffing on it. At length he asked: "Well, what do I get for poking a trainmaster on the chin?"

Eddie was like that—no beating around the bush. He knew that many a railroad man had been fired for less, and he was prepared to face the music. In any event, he wanted to get back to steam railroading. But he'd rather resign from the Pacific Electric with a clean record than be kicked out.

Mr. Donaldson brooded over the question. "There was a word about that from the G.M.," he said. "Only a slight remark. Judging from his tone, I'd say that everybody had better forget it." The super tilted back his chair, gesturing with his cigar. "I called you here to say that I've put in for your transfer to my department. I've got a good station for you."

Eddie hesitated. The careless road swam out of the mist and swept on to enchanted horizons. He caught the absorbed chatter of vigilant sounders woven into the quiet of the heights. Steam was calling him again. Faint and far he could hear the pounding of big Mallets against canyon walls.

"Thanks," he said, "but I've been here a long while and I had better be moving on before I'm stuck in this place. Once you get the wanderlust—well, you know how it is. Any chance of wangling a pass to Portland for me out of the old Southern Pacific?" ●

BOOKS of the RAILS

PUBLICATION date of Oct. 22 has been set for a monumental volume, *The Concise Encyclopedia of World Railway Locomotives*, by Hawthorn Books, 70 Fifth Ave., New York City. Edited by P. Ransome-Wallis, the $12.95 book includes 128 pages of black-and-white photos, 16 pages of locos and trains in full color, more than 100 diagrams and drawings, and a bibliography. There are four chapters on steam, two on diesels, and one each on electrics, locomotive testing, unconventional forms of motive power, and famous locomotive engineers.

A long-awaited biography of Harry Bedwell by Frank P. Donovan, Jr., is being published this fall by Ross & Haines, Inc., 413 S. 4th St., Minneapolis, Minn.; bound in hard covers, 120 pages, many pix, $3.75.

A free copy of a 25-page booklet, *The Truth About the Railroads*, may be obtained by writing to the Railway Labor Executives Ass'n., 401 Third St., N.W., Washington, D. C.

THE MAINE TWO-FOOTERS, by Linwood W. Moody, 324 pages, illustrated, Howell-North Books, 1050 Parker St., Berkeley 10, Calif., $6.

This book tells with fine Yankee flavor the story of 24-inch-gage roads in Maine and Massachusetts and the author's association with them. Moody lives in Maine, has been railroading since age 15.

The Maine Two-Footers is handsomely bound and printed on coated paper, with a surprisingly large number of good photos, timetables, and locomotive rosters.

STEAM LOCOMOTIVE PLAN MANUAL & ALBUM, 64 pages, edited by Harold Carstens, Penn Publications, Inc., Ramsey, N. J., $2.

Help for modelbuilders, culled from detailed plans and photos that appeared in *Railroad Model Craftsman* over a 25-year period.

THE PHANTOM BRAKEMAN and Other Railroad Stories, a pocketbook by Freeman Hubbard, 91 pages, illustrated, TAB Books, Inc., 33 W. 42nd St., New York City, 30¢ by mail, 25¢ at book stalls.

Six fact-stories that dramatize railroad adventure in the Steam Age. Two of them occurred on the Santa Fe, the others on the St. Paul & Duluth, the C&NW, the IC, and the NC&StLouis.

36 MILES OF TROUBLE: The Story of West River RR., by Victor Morse, 40 pages, illustrated, Stephen Greene Press, 120 Main St., Brattleboro, Vt., paperbound $1, boardbound $3.

The 36-mile narrow-gage that ran between Brattleboro and South Londonderry, Vt., for 56 years cut travel time from two days to two hours (when the train didn't break down). This story, enlivened with anecdotes, pix, and a map, is well written.

BULLETIN No. 100, 112 pages, illustrated, Railway & Locomotive Historical Society, Baker Library, Harvard Business School, Boston, Mass., $2 for members, $3 for non-members.

Like nearly all R&LHS *Bulletins* issued since No. 1 in 1921, the latest includes several authoritative articles and is generously illustrated. Charles E. Fisher, president of the Society, edits these *Bulletins*. No. 100 features "Mogul Type Locomotives," by Paul T. Warner, 15½ pages of text plus 16 photos printed on fine coated stock, and five other informative chapters.

MANSIONS ON RAILS: The Folklore of the Private Railway Car, by Lucius Beebe, Howell-North Books, Berkeley, Calif., regular edition $10, limited Gold Coast edition $15.

To be reviewed in our next issue. Advance reports promise a wealth of details, 350 rare illustrations, and six full-color reproductions.

LAW AND LOCOMOTIVES: The Impact of the Railroad on Wisconsin Law in the 19th Century, by Robt. Hunt, 292 pages, illustrated, State Historical Society of Wisconsin, 816 State St., Madison, Wis., $6.50.

Among other things, Hunt bares the LaCrosse & Milwaukee Railroad scandals, telling how a promoter bribed almost an entire legislature, a Supreme Court justice, and a governor. It's all on the record, and much more, amply documented.

GREAT TRAIN ROBBERIES OF THE WEST, by Eugene B. Block, 317 pages, Coward-McCann, Inc., 210 Madison Ave., New York City, $5.

A fast-moving book. Beginning with a Nevada stickup in 1870, Block leads us through a long series of holdups, murders, sensational chases, trials, escapes, and hangings till we reach the last train robbery of record, on the SP in 1933.

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RAILROAD HOBBY CLUB

by Sy Reich

VISITING Europe last summer, your *Hobby Club* editor learned that British Railways were still operating 40,000 or more steam engines, a goodly number, dating from 1888 to 1959, but only about 1000 diesels. Says *The Locomotive*, an English magazine: "Although steam locomotive building has now ceased in Great Britain, many years must still elapse before the steam locomotive disappears finally from Great Britain. During this period the locomotives will still require to be manned and maintained, and it will be necessary to recruit labour for the purpose."

Sy Reich

Apparently the old iron horse, which was born on English soil about a century and a half ago, will make its last stand there. But here in North America we don't know of any effort being put forth to "recruit labour" for manning and maintaining steam locomotives, although more than a few powerful steamers are still pounding the rails regularly on our side of the Atlantic, mostly in Canada.

Now and then a reader asks us to tell him by mail all the places where he could find steam in his particular state or province or some place he plans to visit. We like to oblige, but we have no such itemized list. Even the *Steam Power* section we print every two months is fragmentary at best. We cannot guarantee its accuracy. Parts of it may become obsolete even before they are published. You'd better check on the situation before planning a trip.

Tweetsie RR., the 3-mile steam-powered narrow-gage that used to be the ET&WNC, is now carrying passengers on Roundhouse Mt. at Blowing Rock, N. C., and can be reached by U. S. highways 221 and 231. It is no longer located in Tennessee, as our August issue stated.

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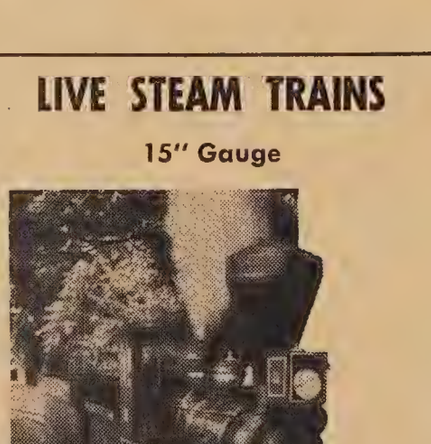

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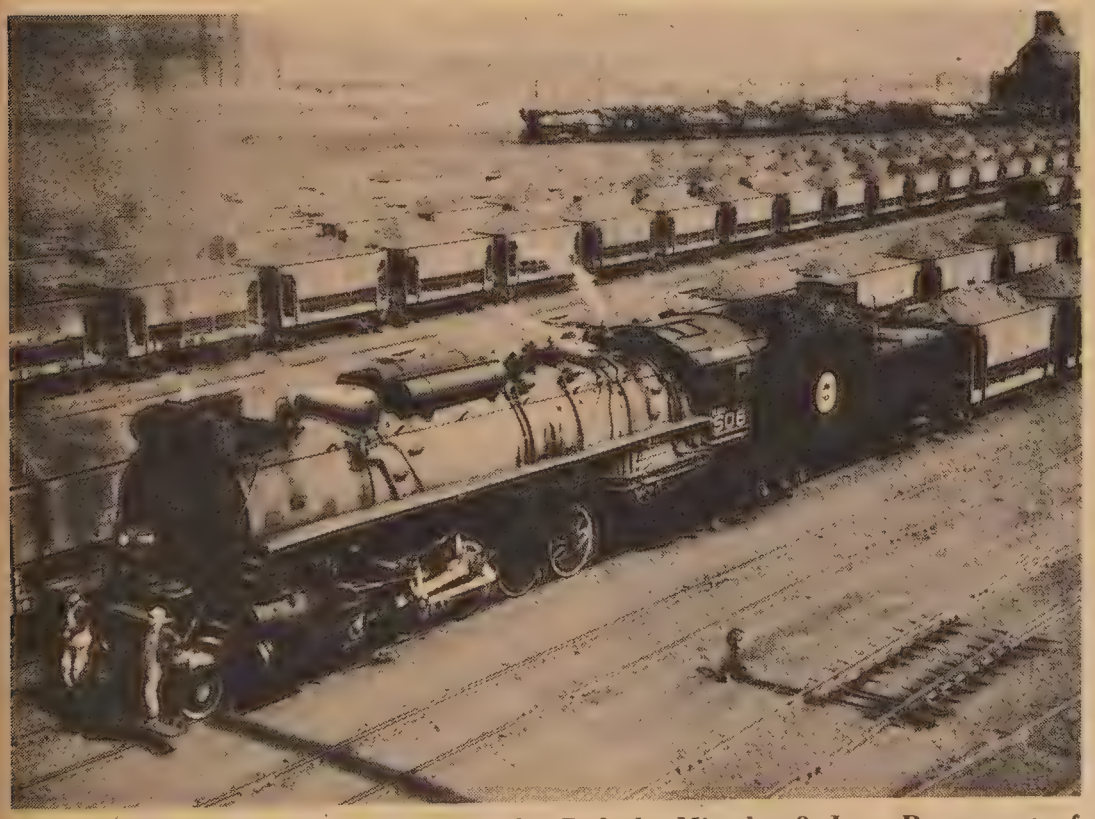

Among the steam locos operated by the Duluth, Missabe & Iron Range out of Proctor, Minn., last summer was No. 506, Class E-1, built by Brooks in 1919.

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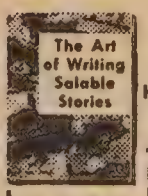

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Copy of new, 24-page, illustrated booklet, *The Great Locomotive Chase* (April 12, 1862), will be sent free on request by Louisville & Nashville RR., Adv. and Publications Dept., P.O. Box 1198, Louisville 1, Ky.

Ever hear of the "Casey Jones Excursions?" Operating out of Seattle, Wash., they've been making history since Miss Carol Cornish began promoting them in 1956. Carol lives at 1521 8th Ave., Apt. 306, Seattle. The trip she sponsored last June 28 to Howard A. Hanson Dam was the final eastbound passenger train operated over the Northern Pacific's low tracks and the first one on the new scenic high tracks.

"It was an epic," Carol tells us. "We carried 1,584 passengers in 21 coaches and a canteen car, but the demand was so heavy that we had to leave behind at least 800 persons who had not ordered tickets far enough in advance. Personally, I prefer steam locomotives. Some time ago I had wondered how rabid steam fans would take to diesels, but experience has shown me that if you offer them an unusual rail trip at low cost they'll show up in large numbers.

"My enthusiasm for railroading really began when I was 18 and girls and fellows double-dated on the old hand speeders after the 10 p.m. train had been put to bed. It was romantic beyond words—the moon, the silver rails, a gentle breeze, and us kids singing popular songs!

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New York Central has donated over 1000 historical items (locomotive bells, lanterns, old schedules, paintings, etc.) to the Albany (N. Y.) Institute of History and Art.

Passenger business on the quaint little Strasburg (Pa.) Railroad is picking up, according to Engineer Bud Swearer, 2427 Eastwood Drive, York, Pa. "We average about 90 people per trip," he says. "We have two locos (one Plymouth, one gas-electric) and are buying a workable steam engine. We have an ex-P&LE Pullman, ex-

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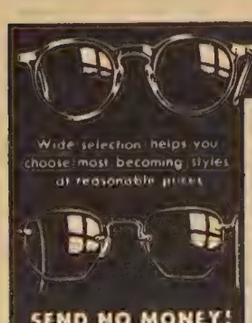

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"Meridian & Bigbee River (not the Southern) donated Consolidation type engine No. 116 to Jimmie Rodgers Memorial Park here," writes Harold J. Freeman, Box 1726, Meridian, Miss. "Jimmie was a 'singing brakeman' on the Southern. I was an extra fireman on M&BR and made the 116's last trip, on a work train in 1955, before she was given to the city. Jimmie's widow lives at 142 Montclair, San Antonio, Texas."

New map folder with info. on touring Britain available free from British Railways Inc., 9 Rockefeller Plaza, New York City.

"Adding to your Chicago South Shore & South Bend roster," writes Bill Blewett, 724 N. Roeske Ave., Michigan City, Ind., "this is one of the few electric lines, if not the only one, that owns a 'big hook.' Its 100-ton, oil-fired, steam wrecking crane was bought at a bargain from the New York Central's Peoria & Eastern. The South Shore also has a double-boom rail-handling crane (air-operated) and a Jordan Spreader which doubles as a snowplow."

"You forgot to list 2-8-8-8-4 (Virginia triplex) in *Wheel Arrangements* (Oct. issue)," writes John Aardema, ex-Erie train dispatcher. "The 2-8-8-4 should be Mallet, not duplex; the 2-8-8-8-2 should be triplex, instead of duplex."

Change in Ill. shortlines roster (Oct. '59): Chicago & Western Indiana has sold loco 251 (now 300) to Roscoe, Snyder & Pacific, according to a report from K. W. Moore.

Montpelier & Barre roster supplied by Elwin K. Heath, Barre, Vt., shows six 0-4-4-0 road switchers, 600 hp, 36" drivers, Nos. 19-24, built by General Electric as follows: No. 19, built 1949, ex-StJ&LC No. 50, owned by B&C while on StJ&LC; No. 20, built 1947, ex-B&C 14; No. 21, built 1947, ex-B&C 12; No. 22, built 1948, ex-B&C 15, ex-StJ&LC 47; No. 23, built 1946, ex-C&C 11, ex-S&S 11; and No. 24, built 1951, ex-G&N 75.

Roster of St. Johnsbury & Lamoille County shows nine 0-4-4-0 diesel road-switchers, 600 hp, 36" drivers, built by GE as follows: No. 46, built 1948; No. 47, built 1948, transferred to B&C in 1956, renumbered 15, later renumbered M&B 22; No. 48, built 1948; No. 49, built 1948; No. 50, built 1949, property of B&C, taken over by M&B in 1958, renumbered 24; No. 51, built 1951; No. 52, built 1947, ex-B&C 13, overhauled by GE 1958; No. 53 and 54, built 1951 and '53 respectively, ex-Mississippi Export Nos. 58 and 50, received by StJ&LC in 1958.

STEAM POWER

IT WAS only natural for Howard Fogg, famed railroad artist and steam devotee, to have made the new sound recording, *All Steamed Up*, that our *Mail Car* section reviews. "I never hunt, fish nor play poker," he says, "but prefer railroad yards and roundhouses. Unlike that of other steam fans, my enthusiasm for locomotives will not die with steam. Diesels are different and should not be compared with steam but approached rather as a newer and often interesting aspect of railroading."

Howard Fogg

Howard's father was at one time vice president of the Litchfield & Madison (now C&NW) and he himself worked for the Union Pacific and Baldwin Locomotive Works before World War II. "Then in 1946," he says, "I started a painting career with Alco, and I am now a free-lance." Two of his paintings appeared on *Railroad Magazine* covers (June '58, Dec. '58).

UP put 15 steamers, 3700's and 4000's, in service last summer in Wyo. and Neb. to handle grain rush.

"The Pennsy has 37 2-10-4's and 17 2-10-0's stored at Columbus, O.," reports David Ingles, 1909 Golfview, Dearborn, Mich. "Some are stored serviceable; others *may* be scrapped before you read these words. Grand Trunk Western commuter trains 72 and 77 (daily exc. Sat. and Sun.) and 54 and

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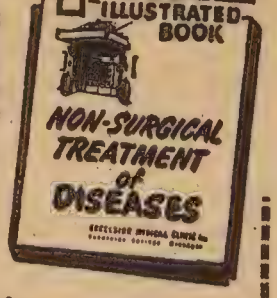

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19 (daily exc. Sun.) are still steam-powered. They run between Detroit and Pontiac, 26.3 miles. About one-third of GTW's Detroit-Durand freights (69.9 miles) also are steam."

"At this writing, GTW is using Mikes, Pacifics, and Northerns in regular passenger service," says David Willing, Box 3583, Federal Sta., Pontiac, Mich., "especially in the Pontiac-Detroit commutation zone, which offers many good photo sites—cuts, fills, bridges, etc."

"GTW is operating 4-8-4's, 2-8-2's, and an 0-8-0," writes Dennis McBeil, 910 E. 6th St., Royal Oak, Mich. "Stored at Durand are all of the above plus 2-8-0's and 4-8-2's. Last June 14 the GTW ran a Detroit-Jackson fantrip for Michigan Railroad Club, using Mike 3752 between Detroit and Pontiac, with light Pacifics 5043 and 5038 doubleheading the rest of the way."

"Just before the steel strike," says Cleland Wyllie, 3926 E. Delhi Rd., RFD 1, Ann Arbor, Mich., "there was some talk that GTW would put on a 4-8-4 freight extra between Durand and Milwaukee Jct. as well as regular steam freight runs between Durand and Bay City and between Pontiac and Oxford, but what the strike has done to these plans I don't know."

Mowrer Lumber Co., Cass, W. Va., has three Shay locomotives, one of which is being used in hauling logs from woods operation to sawmill, according to J. F. Weber, Jr., vice president and general manager.

Down in Georgia, the Gainesville Midland scrapped its last steamer June 30, laments Elmer Braswell, 1581 Melrose Dr., S.W., Atlanta 10, Ga.

Although B&O has no active steamers, a list of B&O power either stored last summer or awaiting the blow-torch comes from Harry Bolon, 1004½ Gaston Ave., Cambridge, O.

At Benwood, W. Va.: 0-8-0 No. 843; Mikes 317, 362, 377; articulateds 651, 653, 659, 664, 665, 670, 674, 676.
At Holloway, Ohio: EM-1 675; Santa Fe types 514, 524, 530, 535, 538; Class Q-3 372.
At Willard, Ohio: 0-8-0 816; Classes S-1 and S-1a 512, 526, 531-533; Classes T-3 and T-3b 700-704, 708, 710, 712, 713, 716, 717, 722, 724-726, 728, 730, 731.

The Sydney & Louisburg of Nova Scotia, Canada, is still a steam fans' paradise, according to David Plowden, who is making a picture-story of it for our next issue. S&L runs a mixed train on its 39 miles of main line, freight only on two branch lines totaling 13½ miles, and has 31 active steamers (Mikes, Moguls, Consolidations, 6-wheel switchers, 8-wheel switchers), divided between Sydney and Glace Bay.

Four Clinchfield 4-6-6-4's are stored dead at Erwin, Tenn., yards, to be scrapped, reports John Hilton, who offers this partial list of steam locos in Washington, D. C., Maryland, and Va.:

Washington: spur serving St. Elizabeth's Hospital, No. 4 (0-4-0), last engine built by Porter, operates in winter only.
Baltimore, Md.: Western Maryland, two 4-6-2's, 200 series, used as stationary boilers at Port Covington terminal.
Hagerstown, Md.: Western Maryland 202 (4-6-2) on display in city park.
Security, Md.: N. Amer. Cement Co. 0-4-0T in operation.
Williamsport, Md.: Potomac Edison Co. 0-4-0T, Vulcan.
Alexandria, Va.: Potomac Electric Power Co. 0-4-0 fireless loco (has another "fireless cooker" at Buzzards Point).
Richmond, Va.: Richmond, Fredericksburg & Potomac 600 series 4-8-4, stored in open at Acca Yard.
Piney River, Va.: Virginia Blue Ridge Railroad operates ex-Army 0-6-0's daily.

"Six miles west of Farmington, Ill., the United Electric Coal Corp. operates six former Minneapolis & St. Louis 0-6-0's, hauling coal from pit to tipple, night and day in winter but daytime only in summer," writes Richard Howard, 223 W. Vine St., Canton, Ill. "Also at Galesburg, Ill., the Burlington has some steamers stored."

"Canadian Pacific yards and roundhouse at McAdam are just loaded with steam," exults Gale Haggard, 4802 Flastone Ave., Chevy Chase 15, Md., "but anyone who wants to take pix had better hurry. Last summer 8-wheeler No. 29, age 72, with 17x24" cylinders, laid aside her duties with the CPR in New Brunswick to assist the citizens of Caribou, Maine, in celebrating their centennial. She was the 65th engine built by CPR and is said to be the oldest loco now operating in North America. I saw her being repainted in the company's shops at McAdam, N. B. A high diamond stack was installed for the display."

Also in Canada, Chris Nix reports you can still see much CPR steam at Belleville, Ont., his home town.

You can still find steam power in British Columbia, reports Doug Cummings, 8070 Oak St., Vancouver 14, B.C., Canada, who sends us data:

B.C. Forest Products has abandoned all its lines except one at Crofton and all its steam engines; uses one diesel.
Canadian Forest Products, 150-mile line out of Englewood, east coast of Vancouver Island, has 14 active locos: a 2-6-6-2, 2 2-6-2T, a 2-8-2, 2 Shays, diesels, including a diesel Shay, and gas locos. Steamers are oilburners, radio-equipped. CFP's only Heisler has been scrapped.
Osborne Bay Wharf Co. uses 26-ton, coalburning, Lima-built Shay, No. 1, on 33 miles of track at Crofton. Company is owned by Hillcrest Lumber.
Hillcrest Lumber uses 3-truck oilburning Climax No. 10 at Mesachie Lake and keeps 2-truck coalburning Climax No. 9 as a spare.
Comox Logging & Ry., owned by Crown-Zellerbach, uses 6 steamers at Ladysmith. Has two 2-6-2T's, Nos. 2 and 7, both Baldwin-built in 1910, stored serviceable and used as needed in work-train or logging. No. 7 is ex-PGE, has auxiliary tender.
MacMillan & Bloedel, once a huge logging road, has abandoned large operations and is currently hit by a strike. Recent amalgamation with Powell River Co. may help. Its steam locos (2-8-2T, 2-6-2T, all oilburners) are well kept. Uses diesels at Harmac, near Nanaimo. Shay No. 1 (Lima, 1911) is on display at Deerholm, Shay No. 2 at Port Alberni.
Western Forest Industries, of Honeymoon Bay, took over Lake Logging about 10 years ago. It now uses a diesel, No. 7, but keeps 3-truck, oilburning Shay No. 5 (Lima, 1928) for use as needed.
Pacific Coast Terminals, with 5.2-mile dock road at New Westminster, uses two 0-6-0's, Nos. 4012 (Alco, 1942) and 4076 (Lima, 1944), both well kept. Its Shay and 0-6-0T were scrapped, its Heisler sold.
Pacific Great Eastern uses 2-8-2 No. 160 (Can. Loco. Co., 1945) as stationary boiler at Squamish. Its old roundhouse there is now a diesel shop.
Hastings Saw Mills 0-4-4T is on display at Vancouver's Hastings Park. Built in 1879 as an 0-4-0T, she helped construct CPR before being sold to HSM in 1888 and converted. Well kept.

Wellington Colliery has well-kept 42"-gage "Wellington" (Baldwin, 1883) on display at Nanaimo.

Canadian Collieries (Dunsmuir) Ltd. uses 2-6-0 No. 17 and 4-6-0 No. 14 to switch wharf at Union Bay. Its Englewood Div. hauls iron ore and lumber.

Mayo Lumber recently put 2-truck woodburning Shay No. 3 on display at Baldi. Well kept.

Elk Falls Co. has on display at Duncan Bay ex-CL&R Shay No. 15 (Lima, 1925), bought in 1951 and renumbered No. 1.

New York Central has a 4-8-2 in storage at Selkirk, N. Y., for exhibition purposes, along with the fabulous 999. She is No. 2933, Class L, Alco-built in 1929, cylinders 27x30", drivers 69", boiler pressure 225 lbs., tractive effort 60,620 lbs. plus 12,400 with booster. She is serviceable but can't pull fantrips, due to lack of steam servicing facilities.

When Illinois Central took over the Tremont & Gulf in Louisiana last summer, it scrapped No. 44, T&G's last steam engine, reports George Dykes.

Although the Duluth, Missabe & Iron Range had announced that its steam power this past summer would be stand-by only, if at all, we learn from Howard Peddle, Rte. 1, Box 317, South Range, Wis., that just before the steel strike the road actually operated three or four 2-8-8-4 Mallets daily out of Proctor, Minn., plus half a dozen 2-10-2's switching, and at least one steam road job to Ely. Among those who flocked to the scene was Russ Porter, an illustrator from West Allis, Wis., who made some good shots of steam from overhead bridges without trespassing on company property.

"The strike hit DM&IR pretty hard, but if there is a big demand for steel after it is settled, the road's steam power is likely to be busy again," writes Bob Anderson, 715 E. Pabst St., Ironwood, Mich. "The DM&IR has received 22 new diesels, including six DL-600 Alco 2400-hp models for hauling the heavy ore, and 16 EMD road switchers, SD-9's. I have a current DM&IR roster."

Norfolk & Western at Crewe, Va., has four Class A 2-6-6-4's, four Class 1 0-8-0's, one Class K1a 4-8-2, and one Class J 4-8-4, all on stand-by service, fired up and ready for action, according to Curt Tillotson, Oxford, N. C.

Active steam power in Arizona includes seven 2-8-0's and twelve 2-6-6-2's, both on the Southwest Lumber Mills road at Flagstaff, and the following Magma Arizona engines at Superior: five 2-8-0's, six 2-6-0's, and seven 2-8-2's, reports Norman Orfall, 421 W. 6th Pl., Mesa, Ariz. He says Apache Railway has a 2-8-0 stored at McNary.

A real novelty is the Mikado-type engine built in Japan in 1924 for an American railroad, the Carleton & Coast of Oregon. After running on the C&C for years, she was sold to and used by Port of Grays Harbor, Wash., as No. 5. Recently she was resold to become a museum piece on Carl Schafer's game farm north of Satsop, Wash. So says Kramer A. Adams, of Weyerhaeuser Timber Co., Tacoma, Wash.

H. K. Porter engine

Portland, Ore., Zoo Line now has a steam engine, the *Oregon*, a 4-4-0 painted red and green with shiny brasswork. Practically built by hand with thousands of man-hours of loving care, she was rolled out of the Northern Pacific Terminal Co. roundhouse, loaded on a truck, and delivered to the Centennial Exposition grounds to begin her operating career. She is fueled with distillate. Ewart Edwards, retired SP hogger, pulled the whistle for her first trip. At the Zoo she runs on 30"-gage track. Other trains on this little road are the *Zooliner* and the former fire train of Weyerhaeuser Timber Co. A circus train is now being built for the Zoo Line.

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Coming Events

Oct. 10-12—CPR-CNR steam power, three days at Montreal. Contact Railroad Enthusiasts, New York Division, Williamson Library, Room 5646, Grand Central Terminal, New York 17, N. Y.

Oct. 18—Round trip to Norfolk, Va., on RF&P, ACL, and N&W (steam power), sponsored by NRHS, Washington, D. C., and Old Domini n chapters. From Washington: adults $11.50, kids $6.50. From Richmond, Va.: adults $6.65, kids $3.95. Contact P.O. Box 487, Ben Franklin Station, Washington 4, D. C., or Jack Spangler, 3419 Lanceor Dr., Glen Allen, Pa.

Oct. 18—"Off beaten track" circle trip on Pennsy's Pittsburgh region, mostly on freight-only lines, with picture stops, sponsored by Pittsburgh Elec. Ry. Club. Adults $9.50, kids $4.75. Contact PERC Trip Committee, P.O. Box 832, Pittsburgh 30, Pa.

Oct. 24, 25—Operation of O and HO gage trolley lines at New Haven Society of Model Engineers, 90 Church St., New Haven, Conn. Admission: bring at least one scale trolley. Bring movies, slides. Society holds its fall show, rr. and trolleys, Nov. 6, 8, 13, 15, 20, and 22.

Oct. 25—LIRR trip over main line and Montauk and Central branches in RDC (rail diesel car) sponsored by NRHS, Lehigh Valley Chapter. Adults $4.95, kids $2.50. Lv. Jamaica station 10 a.m. Contact Ernest Kovacs, 416 2nd Ave., Bethlehem, Pa., or Gerhard Salomon, 606 Hamilton St., Allentown, Pa.

Oct. 27—100th anniversary of first L&N train between Louisville and Nashville will be marked by publication of revised "History of L&N," brought up to date. As originally published in 1943, this excellent history had 222 pages, size 8½x11 inches, with 300 photos, maps, other illustrations. The new edition will be impressively larger, more text, more pix. We'll review it soon.

Oct. 29 till Nov. 14—Rail and river cruise out of San Francisco on Western Pacific RR. and SS. Delta Queen, sponsored by WP Employes' Club, open to public. Contact Arthur Lloyd, Jr., tour organizer, Western Pacific RR., 526 Mission St., San Francisco, Calif.

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What a buy! Made to sell for 2.99. Now, get 4 for the price of one! Tho used, they're washed, sterilized, pressed, and ready for long, tough wear! In blue, tan or green.
Send neck size, 1st and 2nd color choice.

PANTS 99c

to match 4 for $3.75

Think of it! Heavy-duty cotton twill pants that sold for 3.85! Now, fully reconditioned and yours at this rock-bottom price!
Send waist measure and inside leg length.

MEN'S COVERALLS

Wear'em used and save plenty! You can't beat this bargain anywhere! The best made. Sold for 6.95. Now... wow!... what savings! **$2.29** 3 for $6.75
Send chest measurement.

Unlined WORK JACKETS 99c 3 for $2.75

Popular Eisenhower type. Four pockets. Heavy-weight twill. In good, solid condition for plenty of rugged wear! Blue only.
Send chest measurement.

SHOP COATS—Like brand new! **$1.79** 3 for $5.00
Send chest measurement.

LADIES' COVERALLS—Though used, in perfect condition! **$1.49** 3 for $4.00
Send dress size.

MONEY BACK GUARANTEE... If not satisfied! That's our way of doing business! You can't lose! So order TODAY. Send $1.00 deposit on C.O.D. orders. Add 25c for postage on prepaid orders.

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Railroadiana

"THANKS for entering me in the *Switch List*," writes Carl Gay. "I've been getting answers at the rate of one a day and making new friends." Many readers write similar letters. All *Switch List* entries are printed free, in good faith but without guarantee. Don't use over 28 words (including name and address) except when you list old issues of this magazine. Use abbreviations such as *tts.* (timetables), *emp. tts.* (employes' timetables), and SAS (send stamped addressed envelope for list or information). If you want pen pals, specify your interests so they will know what to write about.

Because of printing and distribution schedules, your entry should reach us 10 weeks before the issue in which it will appear is due on the newsstands. Address Sy Reich, *Railroad Magazine*, 205 East 42nd Street, New York 17, N. Y.

Puget Sound railfans have raised one-third of $2,500 needed to save NP 6-wheel switcher No. 1070 from scrap pile so they can own and operate her. They need cash. Contact Frank Culp, Jr., 2171 Killarney Way, Bellevue, Wash.

SWITCH LIST

R. C. ALBERTSEN, 5206 6th Ave., Brooklyn, N. Y., sells photos (of what?) and emp. tts. Send for free list.

GARY ALLEN, 509 Tremont Ave., Long Beach, Calif., buys, sells Western trolley pix, size 616 up; buys Western trolley negs.

TONY ANTON, Box 335, Los Angeles 66, Calif., buys pix, data on geared steam locos. Sells 35mm movies steam trs., list 10c

ED BAUMGARDNER, 26 West End Ave., Oneonta, N. Y., will sell Railroad Magazine from 1938 to '54, 30c each. (SAS)

PAUL BLOOMQUIST, 4077 Elenda St., Culver City, Calif., swaps and buys RPO cancellations on cards or covers, any country.

ELMER BRASWELL, 1581 Melrose Drive, S.W., Atlanta 10, Ga., sells 4x5 pix PE, LA Transit, Ga. Power, 5 for $1.

JOE BROWNMILLER, 4102 Magee Ave., Philadelphia 35, Pa., will sell Railroad Magazine Dec. '29 to date, also copies Pennsy mag.

H. BUCKLEY, Jr., Box 203, Silver Spring, Md., wants any size diesel negs., PRR, B&O.

D. G. CAMPBELL, 7902 E. 113th Terr., Kansas City 34, Mo., wants rr. signaling books, esp. Rockwell's "Auto. Ry. Sig."

VIC CANTE, 1615 W. 6th St., Brooklyn, N. Y., wants pix PCC's Cleveland and CTA.

CHAS. CARR, 226 Van Blarcom St., Paterson, N. J., sells railroadiana. (SAS)

G. CARROLL, 20933 Elkwood St., Canoga Park, Calif., wants pix C&NW Madison roundhouse, Dec. '34, Aug. '48 Railroad Magazine.

JOE CAVINATO, Mountain Ave., Gillette, N. J., wants sta. agent or tr. crew pen pals.

JIM CLAYPOOL, 7629 W. Rescher, Chicago 31, Ill., wants pic CB&Q loco 5605.

FRANK CULLENS, Jr., Box 485-A, M. R., Matawan, N. J., wants pic CNJ loco 830.

DOUG CUMMINGS, 8070 Oak St., Vancouver 14, B. C., Canada, sells, trades sizes 116-616 steam negs., pix, esp. CNR, CPR, NP, SP, UP, SP&S, short-lines. List, sample, 25c.

LU CUMMINGS, Jr., 129 Nevin St., Lancaster, Pa., will sell over 300 U. S. car pix, sizes pc, 620; also trfs., tts. (SAS)

HERB DANNEMAN, 1626 W. Wisconsin Ave., Milwaukee 3, Wis., sells reproductions of old interurban tts.: Milw. Elec. 1929; C&IT '23; Ft. Wayne & N. Indiana '16.

JOHN DAVIS, Cushing Ave., Freport, Maine, will pay up to $5 for certain GT steam negs., 616 or pc, esp. 650, 2759,3706, 5072, 5571.

PAT DYSON, 1004 S. Western, Champaign, Ill., will buy Kalmbach's "Locos of PRR" and pix Broad St. Sta., Philadelphia.

ROBT. FIELD, 107 Stanyan St., San Francisco, Calif., buys pix SP, WP, UP, GTW, Vgn., or trades for any size steam negs.

MERRILL FINNEGAN, Box 192-A, East Freedom, Pa., wants any size pic Pennsy 6754.

JACK FLESHNER, 773 Querbes Ave., Montreal 8, Canada, buys, trades, sells trfs., tickets, tokens, trolley pix; answers all mail.

BARRY FRANKLIN, 1521½ Dickens St., Sherman Oaks, Calif., sells LAMTA transfers and tts., also rr. tts., 25c each.

RANDY GARNHART, German Valley, Ill., wants builders' plates, switch keys, any size steam pix taken in Illinois after 1954.

CARL GAY, 460 Linden Ave., Winnipeg 5, Man., Canada, sells CNR, CPR diesel and steam pix. (SAS, American 4c stamp will do); wants pix and negs. all U. S. roads.

JIM GEORGE, 440 McKinley St., Wisconsin Rapids, Wis., sells GB&W diesel negs.

C. K. GIVEN, 2557 S. Parkview Drive., Norristown, Pa., will sell perfect '58 Pennsy calendar, Conway Yd., top bid over $2.

JOHN GODSMARK, 1409 Plaza Ave., New Hyde Park, N. Y., will sell back issues Railroad Magazine from 1931, also LIRR emp. tts. (SAS)

JIM GRAHAM (ex-boomer), 532 S. Gertrude, Stockton, Calif., offers $40 for full set Railroad Magazine Dec. '29 to Dec. '41.

A. C. GRIEB, 1236 Edge Hill Rd., Abingdon, Pa., will sell 2 trolley destination signs, good cond., for best offer.

ADOLF GUTOHRKIN, III, 5821 Gardenia Ave., Long Beach, Calif., buys steam pix, negs., slides, old Railroad Magazines, rr. books.

J. C. HANBACH, Goodrich Rd., Clarence, N. Y., sells back issues Railroad Magazine and electric railway books (SAS)

GRAHAME HARDY, Box 622, Carson City, Nev., buys, sells railroadiana, all kinds, incl. new and second-hand books. Big list free.

Mrs. VERA HARLAN, 11 Cazeneau Ave., Sausalito, Calif., sells for highest bids, express collect, 1922, '25, and '28 "Car Builders Cyclopedia," good cond.

WALT HARRIS, 202 W. Longview Ave., Stockton 7, Calif., sells old Railroad Magazines, U. S., British rail, model mags.; list.

Maj. SAM HENTON, Hq. AAC, APO 942, Seattle, Wash., buys CERA and ERHS Bulletins, streecar plans, pix. Answers all mail.

NAGOTOSHI HONDA (elec. ry. clerk), 2000 Kamino-cho, Ajiyoshi, Kasugai City, Aichi Pref., Japan, welcomes pen pals. (Writes good English.)

CHAS. JOHNSON, Jr., 912 Cedargrove Rd., Wynnewood, Pa., will buy keystone from any Pennsy passenger engine.

ARNOLD JOSEPH, 2512 Tratman Ave., New York 61, N. Y., sells old issues Railroad Magazine, Trains, model mags., NRHS Bulls. (SAS)

TOM KERBY, Rte. 8, Box 427, Tucson, Ariz., will buy SP loco movies 8mm, SP Tucson Div. emp. tts. prior to No. 136, SP steam pix, R&LHS Bulletin 94.

PAUL KUTTA, Shadyside Ave., S. Nyack, N. Y., swaps tts., lists; wants East rds.

OHN LARKIN, Jr., 606 Allcott Ave., Marshall, Mich., sells old postcards: steam, wrecking cranes, interurbans, trolleys, etc.; list 10c. Wants NYC, GTW pix, negs.

JOHN LA RUE, Jr., 66 Mantua Blvd. N., Sewell, N. J., wants data, pix, diagrams of maintenance of way equipment.

TOM LAWSON, 2533 Montevallo Rd., Birmingham 13, Ala., sells boiler insp. sheets from U. S. Pipe Co. loco 15, 5c ea.; loco pic 10c.

C. A. LECOMPTE (Rutland Ry. opr.-clerk), Orwell, Vt., sells CV train orders issued 1892-'95, good cond., 3 for 25c.

RONNIE LEIBOVITCH, 826 Stuart Ave., Outremont, Que., Canada, buys sells, trades trfs., tokens, tickets. Answers all mail.

WM. LINLEX, 37 Delage Ave., Quebec, P. Q., Canada, sells loco pix, various sizes; tts., emp. tts., tr. ords. clearances. (SAS)

F. LILLEY (asst. stationmaster), Malbon St., Bungendore, New South Wales, Australia, wants pen pals to swap folders, pix, mags.

DICK MANICOM, 26 Ave. Des Talos, Ste. Loy, Que., Canada, buys steam negs., Railroad Magazine with CNR roster; write first.

ART MAYOFF, 1165 Van Horne Ave., Montreal, Que., Canada, sells, trades, and buys transfers, tickets, and tokens.

JOHN McQUIGG, 222 Grand Ave., Monrovia, Calif., wants any size pix CGW, LV, DM&IR steam diesel, cab-ahoads, big boys.

B. J. MISEK, 2930 Maple Ave., Berwyn, Ill., sells Midwest elec. tract. 8x10's.

JOHN MOREY, 256 Grand Ave., Leonia, N. J., wants pc size pix LV, CNJ, Erie, DL&W, L&HR, L&NE, N&B, Pennsy diesel, steam.

P. MURPHY, 1726 N. 3rd St., Philadelphia, Pa., wants pix Rdg. steam trains, S. Jersey; Rdg. Camden. roundhouse, etc.

DALLAS NELSON, Chemical Plant Location, Gladstone, Mich., wants GB&W diesel info., also info. on old L&M steam locos.

DAVID NESTLE, Hill St., Greenwich, N. Y., buys, interurban head lamps, markers, emp. tts., rr. books, tickets, passes, railroadiana. (SAS, big list).

GEO. PAPUGA, Jr., 4 Martin Rd., East Haven, Conn., sells Prattsburgh trfs. (SAS)

DAVID PLOWDEN (see front cover), 1239 Madison Ave., New York 28, N. Y., sells black-and-white photos suitable for framing: Union Transp., CV, CNR, CPR, GN, DL&W, CNJ, Rut, B&A: 5x7, $1.25; 8x10, $2.50; 11x14, $5.

NORMAN REINHARDT, 68 Caroline Ave., Clifton, N. J., wants Oct. '50, Oct. '51 Railroad Magazine, good cond. Will sell Erie, CNR mags.; Erie flag, $2.50; lantern, $5.

BILL RHOADS, 101 Paxtang Ave., Harrisburg, Pa., wants pix or booklet of Reading and Harrisburg trolleys.

ERIC RODGERS, 26 Brooklake Rd., Florham Park, N. J., wants rr. lanterns; send list.

G. RUCH, 3834 W. 105th St., Chicago, Ill., will buy switch keys from B&OCT, Chi. Short Line, GM&C, Ill. Northern.

JIM SABOL, 1625 12th Ave., Seattle 22, Wash., wants CERA Bulletin 95.

JOHN SCOTT, 3399 Reed Way, Concord, Calif., sells loco bells, whistles, headlights, horns, sight glasses, gages, etc. (SAS)

J. SHAFER, Box 84, no full address given.

W. D. SHERMAN, 511 N. 6th St., Crockett, Texas, buys brass switch keys, all rds.

JACK SIMPSON, 5449 E. St. Clair, Indianapolis, Ind., buys, sells diesel pix; sells info. and tts. of big roads.

DON SMITH, 5050 Kedzie, Chicago 32, Ill., buys, sells, trades 35mm slides elec. trac. Wants old items, esp. PE, New Orleans.

BOB SPENCER, 5880 N. Hollywood Blvd., Hollywood 28, Calif., sells railroadiana.

WILF STALLAN, 42 Treverton Dr., Scarborough, Ont., Canada, wants info. on Can. Northern before amalgamation.

LARRY STEINGARTEN, 690 Academy St., New York 34, N. Y., swaps transfers; write.

WARREN STOWMAN, 2011 W. Godfrey Ave., Philadelphia 38, Pa., will trade for or buy any size Wilm. & N. No. 16 or 18 or as P&R 258 (16) or 259 (18).

TONY TALBOTT, 2905 Annin St., Philadelphia 46, Pa., wants Toronto subway car pix.

WALT THAYER, Box 1634, Wenatchee, Wash., sells, trades steam and diesel pix, many roads; sells old slides GN diesels, some foreign trolley and steam issues Western Railroader, Trains, Ry. Age, color pix. (SAS) Develops b&w and color film for fans.

CURT TILLOTSON, College St., Oxford, N. C., sells emp. tts., many rds.; list 10c.

BILL WARDEN, 1216 Shamrock Lane, Waynesboro, Va., sells steam, diesel action pix N&W, PRR, B&O, etc., all sizes; list, sample, 10c.

G. T. WAUGH, Box 247, Gambier, O., publishes Best RR. Data monthly (rail news, etc.), 10c copy, $1.50 year.

JOHN WEIGHTMAN, P. O. Box 696, Sacramento 3, Calif., sells old Northern Elec. (West Sacramento) streetcar pix, 20c each.

CLARENCE WEIHE, Box 102, Postville, Iowa, sells old Railroad Magazines. (SAS)

HAL WILMUNDER, Rte. 1, Box 805, Roseville, Calif., wants pix 36" gage locos, cars, etc., incl. logging, quarry; write details.

KEN WILSON, 5245 Trenholme Ave., Montreal 29, Que., Canada, sells Canadian rr. pix, 5x7, smaller. List, 5c coin (U. S. or Can.).

NEIL WOOD, 302 N. Main St., Towanda, Pa., wants steam pix, 5x7 or smaller, B&LE, LV, C&EI.

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I have found a proven formula for quick success in making money. Others I've shared it with also have been successful. Would you like to know about it?

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I have proven this plan with 103 imports — and the opportunities for the sale by mail of thousands more are breathtaking in their possibilities. Hunting knives and binoculars from Germany, silverware from Sheffield, England — hand-carved art objects from Africa — all costing less than $1 abroad have values up to $5 or more here and are big sellers by mail order.

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As I write this, I am receiving as many as 1,000 cash orders a day for imported clocks — all by mail order. They cost me only 63¢ and I sell them far below the U.S. market — a terrific bargain and a wonderful seller. And, I don't stock them as they are shipped direct to the buyers from abroad, *after I receive the cash.*

So you see, it is even possible to conduct a business of this kind without investing in merchandise.

Mrs. McGinn, one of my students in Illinois, operates a gift shop and sells Arabian perfume by mail order. F. Basler, N. J., sells Aztec bird feather pictures from Mexico to stores and by mail order.

You might ask, "Why do you let others in on your plan? Why don't you keep it all for yourself?" The answer is that items for import are countless. No one person could possibly handle even a small proportion of them. There's plenty of business in import-export for you and me and many others.

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JIM WREN, 440 Sunnyslope Ave., Petaluma, Calif., trades Western shortline pix for n.g. or shortline pix, any state.

MIKE VAIUSO, Jr., 32 Northampton Rd., Amsterdam, N. Y., wants to hear from 8mm fans. Sells, trades 8x10 glossy pix of locos.

IRA FRIEDMAN, 215 Main St., Port Washington, N. Y., will sell Travelers' Guide, Aug. '89, $7.50; other rr. books. (SAS)

PAUL JENCK, 15 W. Washington, Norwalk, O., wants Lake Shore Elec. pix, info., tts.

JOHN JONAS, 30 Northgate Rd., Riverside, Ill., will buy Clark's Elementary Treatise on Steam and Steam Engine.

AL McCORD, 600 E. Pearl St., Greenwood, Ind., will sell 68 old rr. passes, 37 rds.; 1858 Travelers' Guide with big map.

JOE M'MAHON, 15 Adrian Ave., New York City, sells Eastern tts., emp. tts.; Off. Guides, '46-'48, $1.25; elec. ry. items, old issues Trains. (SAS)

NORMAN ORFALL, 421 W. 6th Pl., Mesa, Ariz., trades emp. tts., rr. mags., rulebooks, tr. orders, other railroadiana. Wants railfan pen pals.

HOWARD PEDDLE, Rte. 1, Box 317, South Range, Wis., will swap size 116 negs. and 3x5 pix of DM&IR and D&NE steam for old issues Model Railroading.

ALLEN SHARP, 100 Shennecossett Parkway, Groton, Conn., sells tts., emp. tts., 1915-'49; back issues Railroad Magazine, other railroadiana. List plus rr. souvenir, 20¢ coin. Wants Civil War items.

FRANK REILLY, 306 Front St., Dunellen, N. J., wants CNJ steam pix and 35mm color slides, also old Dunellen yards, roundhouse.

BEN SMITH, 265 Tompkins Ave., Brooklyn, N. Y., will swap old issues Railroad Magazine, model mags., for rr. books, Baldwin mags., old rr. calendars, etc.

WALLACE SWANSON, 5729 27th Ave., N.E., Seattle 5, Wash., will sell 50 pc. steam negs. of NW shortlines and Class I rds., also back issues Railroad Magazine.

MODEL TRADING POST

DICK FULLERTON, 54 S. Delmar, Dayton 3, O., will swap 6 straight 4-ft. secs. Buddy L outdoor T-rail track, good cond., for any car of same gage.

WM. HOWARD, 633 Hamilton St., N.W., Washington 11, D. C., will buy old or new Lionel trolley and passengers cars.

TOM HYCHALK, 58 W. Maple Ave., Morrisville, Pa., will buy Lionel B&O loco 2368.

JOHN LARKIN, Jr., 606 Allcott Ave., Marshall, Mich., wants plans GTW 4-8-4.

L. D. MOORE, Jr., 2102 Parker Ave., Portsmouth, Va., will sell 3 standard-gage Lionel 10E, many other items. (SAS)

TOM O'NEIL, 715 Verner Ave., McKeesport, Pa., wants Li. boxcars 027, any cond.

NORMAN REINHARDT, 68 Caroline Ave., Clifton, N. J., will sell plastic cabooses and boxcars, 0 or 027 gage, 75c each.

JIM WALKER, 334 N. Harrison St., Knightstown, Ind., wants Lionel 2660 crane car and Li. "Handbook for Model Builders."

A. KOEHLER, 8 Sherwood Dr., New Providence, N. J., will sell scale 0 gage eqpmt. (SAS)

ALDEN MILLER, 3214 34th Ave. S., Minneapolis 6, Minn., wants Lionel or Boucher Blue Comet st.-gage tr. set, good cond., complete.

AVERY von BLON, Box 6422 BU Station, Waco, Texas, has 600-Class O gage cars for sale or trade for rr. books, tts., passes, switch keys.

ALLEN SHARP, 100 Shennecossett Pkwy., Groton, Conn., sells model rr. mags, 1935 to date; other material. List 10c coin.

New Publications

STREET RAILWAYS OF ST. LOUIS, by Forrest A. Swyers, covers city and suburban lines in 32 pages, half of which are photos. Included are several short independent lines, the Water Works, etc. Price $2, from Felix F. Reifschneider, Box 88, Fairton, N. J.

THE A B C OF TRAMWAYS, 6x9 inches, published by International Photo Exchange Bureau, is a collection of 46 pix of streetcars in various countries, with data. Price f5.50 in Dutch currency or its equivalent, from B. Willemsen, Grutstraat 34, Doetinchem, Holland.

TRANSIT AND THE TWINS, by Stephen A. Kieffer, published by Twin City Rapid Transit Co., 1 South 11th St., Minneapolis, Minn., 60 pages, 6x9 inches, is a well-written illustrated account of Minneapolis and St. Paul streetcar and bus lines, $1, 5 for $3.33.

TRANSPORTATION, March-April issue, published by Connecticut Valley Chapter, NRHS, features Connecticut Public Utility Commission reports with full data on all trolley lines in the state from 1921 to '30, with rare photos. Price 25 cents, from Roger Borrup, Warehouse Point, Conn.

Men's Mart

All products shown here may be obtained directly from indicated sources. Send check or money order with your order. Manufacturer will refund full purchase price on prompt return of unused, non-personalized items. This department is not composed of paid advertising.

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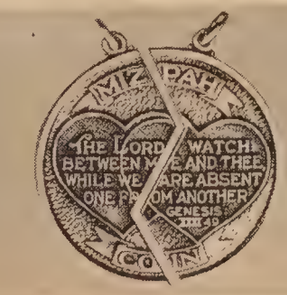
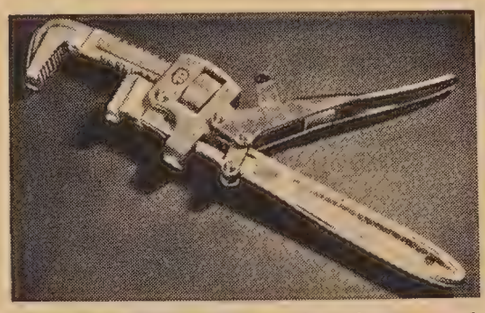


MIZPAH COIN bears inscription from Genesis—truly a symbol of love and thoughtfulness. Significantly designed, each half is match-mated. Comes in sterling silver or gold-filled. One-inch diameter, $2.50; 1¼", $4; 1½", $5 ppd. Inscription on reverse side if desired is 10¢ per letter. An impressive gift. Wayne Silversmiths, 546A, S. B'way, Yonkers, N.Y.

PERFECTA GUN is ideal for sporting events an stage use. This German .22 caliber, 7-shot r peater automatic loads from bottom of handl Just 4" long, fits easily into pocket or purs This model is triggered for lots of fun for $6.9 ppd. (Not available to Calif. residents.) From Be Values, Dept. F-42, 403 Market, Newark, N.



NEW GRIP WRENCH—the first clamp wrench ever made—it's a remarkable tool. Clamp at side locks wrench head with 2,000 lbs. gripping pressure. Fine as lock or pipe wrench, clamp or portable vise. Made in Germany, measures 10". Jaws open 4". A buy for $3.95 ppd. Lee Products, Dept. A, 103 Park Avenue, New York 17, N.Y.

TREASURE of stamps from all corners of the wor A giant assortment—2,150 all different—makes fascinating and exotic collection. Made up of ma different sizes, shapes and colors, stamps go fr ferocious animals to royalty. Stamp wallet and 1 hinges come free with collection. $5.45 ppd. Fr Frasek Company, Dept. MG, White Plains, N.

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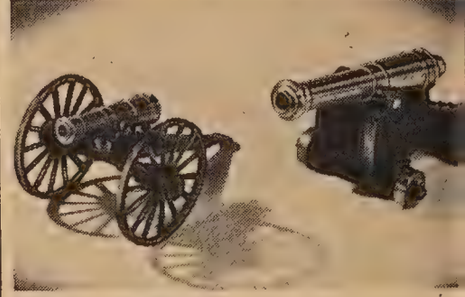
SLIM-R supports without binding or compressi Made of elasticized fabric, it holds smoothly a evenly without "corseted" look. Slims waistline inches, eases bachache caused by sagging stoma and improves posture. Smooth, doesn't show un light clothing. Give waist size. $4.98 ppd. Pi Brace, Dept. A, 11 Wyandotte, Kansas City, M

.22 Cal. Automatic $6.95

The skilled hand of the German gunsmith is responsible for this .22 caliber, 6-shot repeater automatic with self-ejecting clip. Just 4" long. fits easily into pocket or purse. Ideal for sporting events, stage use (not available to Calif. residents). Comes for $6.95 ppd. from *Best Values*, **Dept. K-927, 403 Market, Newark, New Jersey.**



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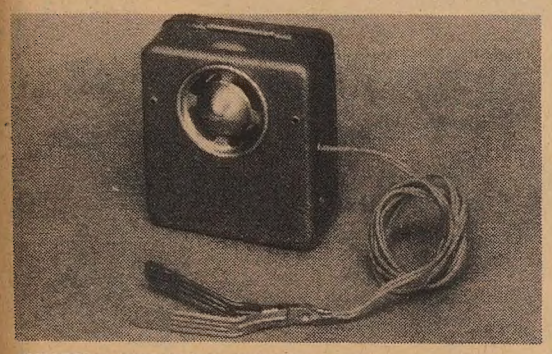
EYELET PLIERS will punch neatly through fabric, leather, oilcloth, paper, plastic etc. A money-saver with many uses, it's ideal for camping equipment, belts, shoes, chairs, shower curtains, luggage straps, office records, etc. With 300 colorful eyelets, $1.98 ppd. Prince Enterprises, 60 East 42nd St., Dept. AR, New York 17, N.Y.



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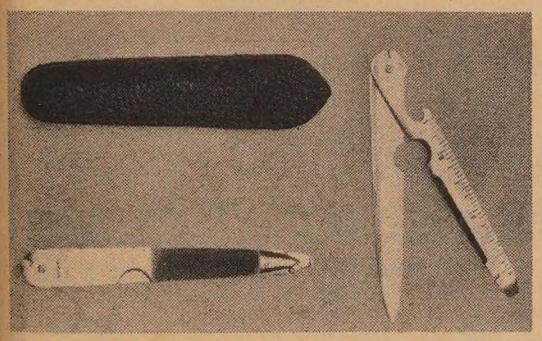

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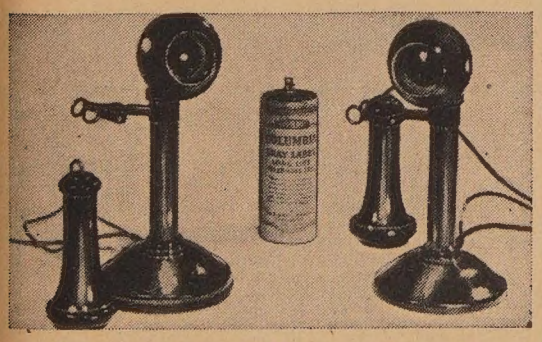

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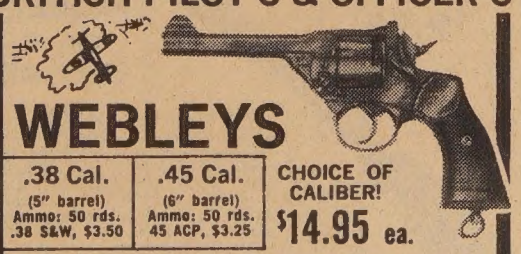

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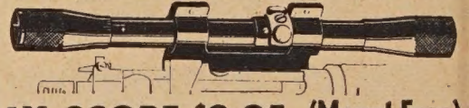

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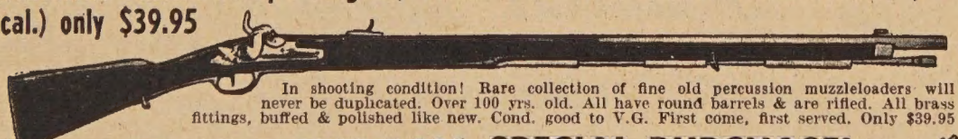

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